ment. (1) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of subsections (2) and (3) of this section. These wastes may, however, continue to meet another dangerous waste listing description or may exhibit one or more of the dangerous waste characteristics.

(2) Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams, in a manner that minimizes or eliminates the escape of dangerous waste or constituents, leachate, contaminated drippage, or dangerous waste decomposition products to the ground water, surface water, or atmosphere.

(a) Generators will do one of the following:

(i) Prepare and follow an equipment cleaning plan and clean equipment in accordance with this section;

(ii) Prepare and follow an equipment replacement plan and replace equipment in accordance with this section; or

(iii) Document cleaning and replacement in accordance with this section, carried out after termination of use of chlorophenolic preservatives.

(b) Cleaning requirements.

(i) Prepare and sign a written equipment cleaning plan that describes:

(A) The equipment to be cleaned;

(B) How the equipment will be cleaned;

(C) The solvent to be used in cleaning;

(D) How solvent rinses will be tested; and

(E) How cleaning residues will be disposed.

(ii) Equipment must be cleaned as follows:

(A) Remove all visible residues from process equipment;

(B) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

(iii) Analytical requirements.

(A) Rinses must be tested in accordance with SW-846, Method 8290.

(B) "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, Table 1.

(iv) The generator must manage all residues from the cleaning process as F032 waste.

(c) Replacement requirements.

(i) Prepare and sign a written equipment replacement plan that describes:

(A) The equipment to be replaced;

(B) How the equipment will be replaced; and

(C) How the equipment will be disposed.

(ii) The generator must manage the discarded equipment as F032 waste.

(d) Documentation requirements. Document that previous equipment cleaning and/or replacement was performed in accordance with this section and occurred after cessation of use of chlorophenolic preservatives.

(3) The generator must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:

(a) The name and address of the facility;

(b) Formulations previously used and the date on which their use ceased in each process at the plant;

(c) Formulations currently used in each process at the plant;

(d) The equipment cleaning or replacement plan;

(e) The name and address of any persons who conducted the cleaning and replacement;

(f) The dates on which cleaning and replacement were accomplished;

(g) The dates of sampling and testing;

(h) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;

(i) A description of the tests performed, the date the tests were performed, and the results of the tests;

(j) The name and model numbers of the instrument(s) used in performing the tests;

(k) QA/QC documentation; and

(l) The following statement signed by the generator or his authorized representative: I certify under penalty of law that all process equipment required to be cleaned or replaced under WAC 173-303-083 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-083, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-083, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-083, filed 2/10/82.]

WAC 173-303-084 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-084, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-084, filed 3/7/91, effective 4/7/91. 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 are the only acceptable methods, unless the department approves an equivalent test method in accordance with WAC 173-303-910(2).

(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), and (8) of this section. If a person's solid waste exhibits one or more of these characteristics, then he or she is a dangerous waste generator (and may not be considered a small quantity gener-

ator as provided in WAC 173-303-070(8)) if the quantity of their 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-93-79 or D-93-80, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78;

(ii) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard;

(iii) It is an ignitable compressed gas that is defined in 49 CFR 173.115 and is determined to be flammable by the test methods described in that regulation; or,

(iv) It is an oxidizer, if it is defined as such in 49 CFR 173.127 and 173.128.

(b) A solid waste that exhibits the characteristic of ignitability must be designated DW, and assigned the dangerous waste number of D001.

(6) Characteristic of corrosivity.

(a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has any one or more of the following properties:

(i) It is aqueous and has a pH less than or equal to 2, or greater than or equal to 12.5, as determined by a pH meter using Method 9040 in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," EPA Publication SW-846, as incorporated by reference in WAC 173-303-110 (3)(a);

(ii) It is liquid and corrodes steel (SAE 1020) at a rate greater than 0.250 inch (6.35 mm) per year at a test temperature of 55 degrees C (130 degrees F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," EPA Publication SW-846, as incorporated by reference in WAC 173-303-110 (3)(a); or

(iii) It is solid or semi-solid which, upon testing using Method 9045 in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*" (SW 846), results in a pH less than or equal to 2, or greater than or equal to 12.5.

(b) A solid waste that exhibits the characteristic of corrosivity because:

(i) It has either of the properties described in (a)(i) or (ii) of this subsection will be designated DW, and assigned the dangerous waste number of D002;

(ii) It only has the property described in (a)(iii) of this subsection will be designated DW, and assigned the dangerous waste number of WSC2.

(7) Characteristic of reactivity.

(a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

(i) It is normally unstable and readily undergoes violent change without detonating;

(ii) It reacts violently with water;

(iii) It forms potentially explosive mixtures with water;

(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 173.54, or a Class 1 explosive, Division 1.1, Division 1.2, Division 1.3, and Division 1.5, as defined in 49 CFR 173.50.

(b) A solid waste that exhibits the characteristic of reactivity must be designated DW, and assigned the dangerous waste number of D003.

(8) Toxicity characteristic.

(a) A solid waste exhibits the characteristic of toxicity if, using the *Toxicity Characteristic Leaching Procedure* (TCLP), test Method 1311 in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," EPA Publication SW-846, as incorporated by reference in WAC 173-303-110 (3)(a), the extract from a representative sample of the waste contains any of the contaminants listed in the toxicity characteristic 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 using the methodology outlined in Method 1311, is considered to be the extract for the purpose of this subsection.

(b) A solid waste that exhibits the toxicity characteristic has the dangerous waste number specified in the list which corresponds to the toxic contaminant causing it to be dangerous.

(c) Toxicity characteristic list. Any waste that contains contaminants which occur at concentrations at or above the DW threshold must be designated DW.

TOXICITY CHARACTERISTICS LIST:

Maximum Concentration of Contaminants for the Toxicity Characteristic

Dangerous Waste Number	Contaminant	(Chemical Abstracts Services #)	DW (mg/L)
D004	Arsenic	(7440-38-2)	5.0
D005	Barium	(7440-39-3)	100.0
D018	Benzene	(71-43-2)	0.5
D006	Cadmium	(7440-43-9)	1.0
D019	Carbon tetrachloride	(56-23-5)	0.5
D020	Chlordane	(57-74-9)	0.03
D021	Chlorobenzene	(108-90-7)	100.0
D022	Chloroform	(67-66-3)	6.0
D007	Chromium	(7440-47-3)	5.0
D023	o-Cresol	(95-48-7) /1/	200.0

Dangerous Waste Number	Contaminant	(Chemical Abstracts Services #)	DW (mg/L)
D024	m-Cresol	(108-39-4) /1/	200.0
D025	p-Cresol	(106-44-5) /1/	200.0
D026	Cresol	/1/	200.0
D016	2,4-D	(94-75-7)	10.0
D027	1,4-Dichlorobenzene	(106-46-7)	7.5
D028	1,2-Dichloroethane	(107-06-2)	0.5
D029	1,1-Dichloroethylene	(75-35-4)	0.7
D030	2,4-Dinitrotoluene	(121-14-2) /2/	0.13
D012	Endrin	(72-20-8)	0.02
D031	Heptachlor (and its epoxide)	(76-44-8)	0.008
D032	Hexachlorobenzene	(118-74-1) /2/	0.13
D033	Hexachlorobutadiene	(87-68-3)	0.5
D034	Hexachloroethane	(67-72-1)	3.0
D008	Lead	(7439-92-1)	5.0
D013	Lindane	(58-89-9)	0.4
D009	Mercury	(7439-97-6)	0.2
D014	Methoxychlor	(72-43-5)	10.0
D035	Methyl ethyl ketone	(78-93-3)	200.0
D036	Nitrobenzene	(98-95-3)	2.0
D037	Pentachlorophenol	(87-86-5)	100.0
D038	Pyridine	(110-86-1) /2/	5.0
D010	Selenium	(7782-49-2)	1.0
D011	Silver	(7440-22-4)	5.0
D039	Tetrachloroethylene	(127-18-4)	0.7
D015	Toxaphene	(8001-35-2)	0.5
D040	Trichloroethylene	(79-01-6)	0.5
D041	2,4,5-Trichlorophenol	(95-95-4)	400.0
D042	2,4,6-Trichlorophenol	(88-06-2)	2.0
D017	2,4,5-TP (Silvex)	(93-72-1)	1.0
D043	Vinyl chloride	(75-01-4)	0.2

/1/ If 0-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used.

/2/ At the time the TC rule was adopted, the quantitation limit was greater than the calculated regulatory level. The quantitation limit therefore became the regulatory level.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-090, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-090, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-090, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-090, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-090, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-090, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-090, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-090, filed 2/10/82.]

WAC 173-303-100 Dangerous waste criteria. (1) Purpose. The purpose of this section is to describe methods for determining if a solid waste is a dangerous waste by the criteria set forth in this section. The dangerous waste criteria consist of:

(a) Toxic dangerous wastes; and

(b) Persistent dangerous wastes.

(2) References. The National Institute for Occupational Safety and Health's (NIOSH) Registry of Toxic Effects of Chemical Substances (RTECS), Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 is adopted by reference.

(3) A person must use data which is available to him, and, when such data is inadequate for the purposes of this section, must refer to the NIOSH RTECS to determine:

(a) Toxicity data or toxic category for each known constituent in the waste;

(b) Whether or not each known constituent of the waste is a halogenated organic compound or a polycyclic aromatic hydrocarbon as defined in WAC 173-303-040.

(4) Quantity exclusion limit. A solid waste is a dangerous waste if it meets one or more of the dangerous waste criteria described in subsections (5) and (6) of this section. If a person's solid waste meets one or more of these criteria then he or she is 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 the waste exceeds the following quantity exclusion limits:

(a) For toxic dangerous wastes designated as EHW (WT01), the quantity exclusion limit is 2.2 lbs. per month.

(b) For all other wastes designating under this section the quantity exclusion limit is 220 lbs. (100 kg) per month or per batch.

(5) Toxicity criteria. Except as provided in WAC 173-303-070 (4) or (5), a person must determine if a solid waste meets the toxicity criteria under this section by following either the instructions for book designation, when his knowledge of the waste is sufficient, or by testing the waste using the biological testing methods adopted under WAC 173-303-110(3).

(a) Except as provided in WAC 173-303-070(4), if a person knows only some of the toxic constituents in the waste or only some of the constituent concentrations, and if the waste is undesignated for those known constituents or concentrations, then the waste is not designated for toxicity under this subsection.

(b) Book designation procedure. A person may determine if a waste meets the toxicity criteria by following the book designation instructions as follows:

(i) A person must determine the toxic category for each known constituent. The toxic category for each constituent may be determined from available data, or by obtaining data from the NIOSH RTECS and checking this data against the toxic category table, below. If data is available for more than one of the toxicity criteria (fish, oral, inhalation, or dermal), then the data indicating severest toxicity must be used, and the most acutely toxic category must be assigned to the constituent. If the NIOSH RTECS or other data sources do not agree on the same category, then the category arrived at using the NIOSH RTECS will be used to determine the toxic category. If toxicity data for a constituent cannot be found in the NIOSH RTECS, or other source reasonably available to a person, then the toxic category need not be determined for that constituent.

TOXIC CATEGORY TABLE

Toxic Category	Fish LC_{50}(mg/L)*	Oral (Rat) LD_{50}(mg/kg)	Inhalation (Rat) LC_{50}(mg/L)	Dermal (Rabbit) LD_{50}(mg/kg)
X	<0.01	<.5	<.02	< 2
A	0.01 - <0.1	.5 - <5	.02 - <.2	2 - <20
B	0.1 - <1	5 - <50	.2 - <2	20 - <200
C	1 - <10	50 - <500	2 - <20	200 - <2000
D	10 - 100	500 - 5000	20 - 200	2000 - 20,000

Toxic Category	Fish LC_{50}(mg/L)*	Oral (Rat) LD_{50}(mg/kg)	Inhalation (Rat) LC_{50}(mg/L)	Dermal (Rabbit) LD_{50}(mg/kg)

* The LC_{50} data must be from an exposure period greater than or equal to twenty-four hours. LC_{50} data from any species is acceptable, however, if salmonid LC_{50} data is available it will supersede all other fish data. If salmonid data is unavailable but fathead minnow data is available, it will supersede all other fish species data.

Note: "Inhalation LC_{50}" means a concentration in milligrams of substance per liter of air which, when administered to the respiratory tract for four hours or less, kills within fourteen days half of a group of ten rats each weighing between 200 and 300 grams.

(ii) A person whose waste contains one or more toxic constituents must determine the equivalent concentration for the waste from the following formula:

$$\text{Equivalent Concentration (\%)} = \frac{\Sigma X\%}{1} + \frac{\Sigma A\%}{10} + \frac{\Sigma B\%}{100} + \frac{\Sigma C\%}{1000} + \frac{\Sigma D\%}{10{,}000}$$

where Σ(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 contains: Aldrin (A Category) - .01%; Endrin (A Category) - 1%; Benzene (D Category) - 4%; Phenol (C Category) - 2%; Dinoseb (B Category) - 5%; Water (nontoxic) - 87%. The equivalent concentration (E.C.) would be:

$$\text{E.C. (\%)} = \frac{0\%}{1} + \frac{(0.01\% + 1.0\%)}{10} + \frac{5.0\%}{100} + \frac{2.0\%}{1000} + \frac{4.0\%}{10{,}000}$$

$$= 0\% + 0.101\% + 0.05\% + 0.002\% + 0.0004\% = 0.1534\%$$

So the equivalent concentration equals 0.1534%.

(iii) A person whose waste contains toxic constituents must determine its designation according to the value of the equivalent concentration:

(A) If the equivalent concentration is less than 0.001%, the waste is not a toxic dangerous waste; or

(B) If the equivalent concentration is equal to or greater than 0.001% and less than 1.0%, the person will designate the waste as DW and assign the dangerous waste number WT02; and

(C) If the equivalent concentration is equal to or less than 0.01%, the DW may also be a special waste; or

(D) If the equivalent concentration is equal to or greater than 1.0%, the person will designate the waste as EHW and assign the dangerous waste number WT01.

Example 1. Continued. The equivalent concentration of 0.1534% (from Example 1. above) is greater than 0.001% and less than 1.0%. The waste is DW and the dangerous waste number WT02 must be assigned. Since 0.1534% is also greater than 0.01%, the waste is not a special waste.

(iv) Reserve.

(c) Designation from bioassay data. A person may determine if a waste meets the toxicity criteria by following the bioassay designation instructions of either:

(i) The DW bioassay. To determine if a waste is DW, a person must establish the toxicity category range (D category toxicity or greater toxicity) of a waste by means of the 100 mg/L acute static fish test or the 5000 mg/kg oral rat test, as described in the biological testing methods (bioassay) adopted in WAC 173-303-110(3). If data from the test indicates that the waste is DW, then the person will assign the dangerous waste number WT02. Otherwise, the waste is not regulated as toxic dangerous waste. No further testing must be done except as provided in WAC 173-303-070 (4) and (5), or if the person chooses to determine whether the waste is EHW, or in the case of state-only solid dangerous waste, if the person chooses to determine whether the waste is special waste; or

(ii) The EHW and special waste bioassay. To determine if a waste is EHW, a person must establish the toxicity category range of a waste by means of the fish bioassay at 10 mg/L or the rat bioassay at 50 mg/Kg, as described in the biological testing methods (bioassay) adopted in WAC 173-303-110(3). (NOTE: A fish bioassay at 1 mg/L corresponds with the definition of EHW, which includes toxic categories X-B. However, the fish bioassay is not reproducible at these low levels.) If data from the test indicates that the waste is EHW, then the person will assign the dangerous waste number WT01. Otherwise, the waste will be designated DW, and the person will assign the dangerous waste number WT02. A person with state-only solid waste may choose to test a waste to determine if it is special waste. Testing levels for special waste must be at 10 mg/L for the fish bioassay or 500 mg/Kg for the oral rat bioassay. No further testing must be done except as provided in WAC 173-303-070 (4) and (5), or if the person chooses to test the waste in accordance with WAC 173-303-100 (5)(c)(i) to determine if the waste is not regulated as toxic dangerous waste.

(d) If the designation acquired from book designation and bioassay data do not agree, then bioassay data will be used to designate a waste. If a waste is designated as DW or EHW following the book designation procedure, a person may test the waste by means of the biological testing methods (bioassay) adopted under WAC 173-303-110(3), using either the static acute fish or the acute oral rat method, to demonstrate that the waste is not a dangerous waste or should be designated as DW and not EHW.

(e) A waste designated as DW by toxicity criteria must be assigned the dangerous waste number of WT02. A waste designated as EHW by toxicity criteria must be assigned the dangerous waste number of WT01.

(6) Persistence criteria. For the purposes of this section, persistent constituents are chemical compounds which are either halogenated organic compounds (HOC), or polycyclic aromatic hydrocarbons (PAH), as defined under WAC 173-303-040. Except as provided in WAC 173-303-070 (4) or (5), a person may determine the identity and concentration of persistent constituents by either applying knowledge of the waste or by testing the waste according to WAC 173-303-110 (3)(c) *Chemical Testing Methods for Designating Dangerous Waste*, February 1998.

(a) Except as provided in WAC 173-303-070(4), if a person knows only some of the persistent constituents in the waste, or only some of the constituent concentrations, and if the waste is undesignated for those known constituents or concentrations, then the waste is not designated for persistence under this subsection.

(b) When a waste contains one or more halogenated organic compounds (HOC) for which the concentrations are known, the total halogenated organic compound concentra-

tion must be determined by summing the concentration percentages for all of the halogenated organic compounds for which the concentration is known.

Example 2. A waste contains: Carbon tetrachloride - .009%; DDT - .012%; 1,1,1 - trichloroethylene - .020%. The total halogenated organic compound concentration would be:

Total HOC Concentration (%)= .009%+ .012%+ .020%= .041%

(c) A person whose waste contains polycyclic aromatic hydrocarbons (PAH) as defined in WAC 173-303-040, must determine the total PAH concentration by summing the concentration percentages of each of the polycyclic aromatic hydrocarbons for which they know the concentration.

Example 3. A person's waste contains: Chrysene - .08%; 3,4 - benzo(a)pyrene - 1.22%. The total polycyclic aromatic hydrocarbon concentration would be:

Total PAH Concentration (%)= .08%+ 1.22%= 1.30%

(d) A person whose waste contains halogenated organic compounds and/or polycyclic aromatic hydrocarbons must determine its designation from the persistent dangerous waste table or persistent dangerous waste criteria graph WAC 173-303-9907.

PERSISTENT DANGEROUS WASTE TABLE

If your waste contains...	At a total concentration level of...	Then your waste's designation, and waste # are...
Halogenated Organic Compounds (HOC)	0.01% to 1.0%	DW, WP02
	greater than 1.0%	EHW, WP01
Polycyclic Aromatic Hydrocarbons (PAH)	greater than 1.0%	EHW*, WP03

*No DW concentration level for PAH.

(7) Reserve.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-100, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-100, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-100, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-100, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-100, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-100, filed 2/10/82.]

WAC 173-303-101 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-101, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-101, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-101, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-101, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-101, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-102 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-102, filed 12/8/93, effective 1/8/94. 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 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-103, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-103, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-103, filed 6/26/87; 84-14-031 (Order DE 84-22), § 173-303-103, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-103, filed 2/10/82.]

WAC 173-303-104 Generic dangerous waste numbers.

(1) Purpose. This section sets forth the dangerous waste number for each of the dangerous waste criteria designations.

(2) Characteristics. A waste which exhibits any of the dangerous waste characteristics, WAC 173-303-090, must be assigned the dangerous waste number corresponding to the characteristic(s) exhibited by the waste.

(3) Criteria. The following table must be used for assigning dangerous waste numbers to wastes designated by the dangerous waste criteria at WAC 173-303-100.

GENERIC DANGEROUS WASTE NUMBERS TABLE

Dangerous Waste#	Dangerous Waste Criteria and Designation
	Toxic Dangerous Wastes
WT01	EHW
WT02	DW
	Persistent Dangerous Wastes Halogenated Organic Compounds
WP01	EHW
WP02	DW
	Polycyclic Aromatic Hydrocarbons
WP03	EHW

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-104, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-104, filed 10/19/95, effective 11/19/95; 94-12-018 (Order 93-34), § 173-303-104, filed 5/23/94, effective 6/23/94. Statutory Authority: Chapter 70.105 RCW. 84-14-031 (Order DE 84-22), § 173-303-104, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-104, filed 2/10/82.]

WAC 173-303-110 Sampling and testing methods.

(1) Purpose. This section sets forth the testing methods to be used to comply with the requirements of this chapter. Quality control procedures specified by the testing method or an approved equivalent method must be followed for the analytical result to be considered valid for designation. All methods and publications listed in this section are incorporated by reference.

(2) Representative samples.

(a) The methods and equipment used for obtaining representative samples of a waste will vary with the type and form of the waste. The department will consider samples collected using the sampling methods below or the most recent version of such methods for wastes with properties similar to the indicated materials, to be representative samples of the wastes:

(i) Crushed or powdered material - ASTM Standard D346-75;

(ii) Extremely viscous liquid - ASTM Standard D140-70;

(iii) Fly ash-like material - ASTM Standard D2234-86;

(iv) Soil-like material - ASTM Standard D1452-80 (Reapproved 1990);

(v) Soil or rock-like material - ASTM Standard D420-93;

(vi) Containerized liquid wastes - "COLIWASA" described in SW-846, as incorporated by reference at WAC 173-303-110 (3)(a), or the equivalent representative sampling method known as the plunger type sampler, described in ASTM D 5743-97, section 8.6; and,

(vii) Liquid waste in pits, ponds, lagoons, and similar reservoirs - "Pond Sampler" described in SW-846, as incorporated by reference at WAC 173-303-110 (3)(a).

(b) Copies of these representative sampling methods are available from the department except for the ASTM standards and the AC & D Liquid Sampler Method which can be obtained by writing to:

ASTM
1916 Race Street
Philadelphia, PA 19103.

AC & D Liquid Sampler Method

AC & D Liquid Samplers
77 Symons Street
Richland, WA 99352

(3) Test procedures. Copies of the test procedures listed in this subsection can be obtained by writing to the appropriate address below:

For copies of Department of Ecology test methods:

Attn: Test Procedures
Hazardous Waste Section
Department of Ecology
PO Box 47600
Olympia, Washington 98504-7600

For copies of SW 846, including updates, and 40 CFR Part 261:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
(202) 512-1800

For copies of ASTM methods:

ASTM
1916 Race Street
Philadelphia, PA 19103

For copies of APTI methods:

APTI
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

The document titles and included test procedures are as follows:

(a) *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication, SW-846* (Third Edition (November 1986) as amended by Updates I (dated July 1992), II (dated September 1994), IIA (dated August 1993), IIB (dated January 1995), III (dated December 1996), and IIIA (dated April 1998)). The Third Edition of SW-846 and its Updates (document number 955-001-00000-1) are available from the Superintendent of Documents. Update IIIA is available through EPA's Methods Information Communication Exchange (MICE) Service. MICE can be contacted by phone at (703) 821-4690. Update IIIA can also be obtained by contacting the U.S. Environmental Protection Agency, Office of Solid Waste (5307W), OSW Methods Team, 401 M Street, SW, Washington, D.C. 20460. Copies of the Third Edition and all of its updates are also available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 605-6000 or (800) 553-6847;

(b) *Biological Testing Methods,* Department of Ecology Publication #80-12, the latest revision, describing procedures for:

(i) Static acute fish toxicity test; and

(ii) Acute oral rat toxicity test;

(c) *Chemical Testing Methods for Designating Dangerous Waste,* Department of Ecology Publication #97-407, February 1998 describing methods for testing:

(i) Ignitability;

(ii) Corrosivity;

(iii) Reactivity;

(iv) Toxicity characteristic leaching procedure;

(v) Halogenated organic compounds; and

(vi) Polycyclic aromatic hydrocarbons.

(d) Reserve;

(e)(i) The determination of Polychlorinated Biphenyls in Transformer Fluids and Waste Oils, EPA-600/4-81-045; and

(ii) Analysis of Polychlorinated Biphenyls in Mineral Insulating Oils by Gas Chromatography, ASTM Standard D 4059-86.

(f) 40 CFR Part 261 Appendix III *Chemical Analysis Test Methods*, which refers to appropriate analytical procedures to determine whether a sample contains a given toxic constituent in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846,* and 40 CFR Part 261 Appendix II, which refers to *Method 1311 Toxicity Characteristic Leaching Procedure.*

(g) The following publications for air emission standards.

(i) ASTM Standard Method for Analysis of Reformed Gas by Gas Chromatography, ASTM Standard D 1946-82.

(ii) ASTM Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), ASTM Standard D 2382-83.

(iii) ASTM Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, ASTM Standard E 169-87.

(iv) ASTM Standard Practices for General Techniques of Infrared Quantitative Analysis, ASTM Standard E 168-88.

(v) ASTM Standard Practice for Packed Column Gas Chromatography, ASTM Standard E 260-85.

(vi) ASTM Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, ASTM Standard D 2267-88.

(vii) ASTM Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Tem-

perature of Liquids by Isoteriscope, ASTM Standard D 2879-86.

(viii) APTI Course 415: Control of Gaseous Emissions, EPA Publication EPA-450/2-81-005, December 1981.

(ix) "API Publication 2517, Third Edition," February 1989, "Evaporative Loss from External Floating-Roof Tanks," available from the American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005.

(x) "ASTM Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteriscope," ASTM Standard D 2879-92, available from American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103.

(h) The following publications:

(i) "Flammable and Combustible Liquids Code" (1977 or 1981), available from the National Fire Protection Association, 470 Atlantic Avenue, Boston, MA 02210.

(ii) U.S. EPA, "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, EPA Publication No. EPA-450/R-92-019, Environmental Protection Agency, Research Triangle Park, NC.

(iii) "ASTM Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals," ASTM Standard E926-88, Test Method C-Bomb, Acid Digestion Method, available from American Society for Testing Materials, 1916 Race Street, Philadelphia, PA 19103.

(iv) Method 1664, Revision A, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Nonpolar Material) by Extraction and Gravimetry. Available from NTIS, PB99-121949, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

(v) ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester, ASTM Standard D-3278-78, available from American Society for Testing and Materials.

(vi) ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Tester, ASTM Standard D-93-79 or D-93-80.

(vii) API Publication 2517, Third Edition, February 1989, "Evaporative Loss from External Floating-Roof Tanks," available from the American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005.

(4) Substantial changes to the testing methods described above will be made only after the department has provided adequate opportunity for public review and comment on the proposed changes. The department may, at its discretion, schedule a public hearing on the proposed changes.

(5) Equivalent testing methods. Any person may request the department to approve an equivalent testing method by submitting a petition, prepared in accordance with WAC 173-303-910(2), to the department.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-110, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-110, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-110, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-110, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-110, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-110, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-110, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-110, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-110, filed 2/10/82.]

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) Reserve;

(iii) Reserved;

(iv) Scrap metal that is not excluded under WAC 173-303-071 (3)(ff);

(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 (this exemption does not apply to fuels produced from oil recovered from oil-bearing dangerous wastes where such recovered oil is already excluded under WAC 173-303-071 (3)(cc));

(vi) Reserve;

(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 40 CFR 279.11 (which is incorporated by reference at WAC 173-303-515(4)) 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 40 CFR 279.11 (which is incorporated by reference at WAC 173-303-515(4)); 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 40 CFR 279.11 (which is incorporated by reference at WAC 173-303-515(4)).

(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).

(3) The following recyclable materials are not subject to the requirements of this section but are subject to the requirements of WAC 173-303-070 through 173-303-110, 173-303-160, 173-303-500 through 173-303-525, and all applicable provisions of WAC 173-303-800 through 173-303-840:

(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) Spent CFC or HCFC refrigerants that are recycled on-site or sent to be reclaimed off-site (see WAC 173-303-506);

(d) 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);

(e) Reserved;

(f) Spent lead-acid batteries that are being reclaimed (see WAC 173-303-520);

(g) Recyclable materials from which precious metals are reclaimed (see WAC 173-303-525);

(h) Spent antifreeze that is recycled on-site or sent to be recycled off-site (see WAC 173-303-522).

(4) 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. For the purpose of this section, recyclable materials received from off-site will be considered stored unless they are moved into an active recycling process within twenty-four hours after being received. An active recycling process refers to a dynamic recycling operation that occurs within a recycling unit such as a distillation or centrifuge unit. The phrase does not refer to passive storage-like activities that occur, for example, when tanks or containers are used for phase separation or for settling impurities. Passive storage-like activities are not eligible for the recycling exemption under this subsection.

The recycling process itself is generally exempt from permitting 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,

(ii) WAC 173-303-120 (4)(e),

(iii) WAC 173-303-283 through 173-303-290,

(iv) WAC 173-303-310 through 173-303-395,

(v) WAC 173-303-630 (2) through (10), and

(vi) WAC 173-303-640 (2) through (10), except 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a) (i.e., a recycler, unless otherwise required to do so, does not have to prepare a closure plan, a cost estimate for closure, or provide financial responsibility for his tank system to satisfy the requirements of this section). In lieu of the dates in WAC 173-303-640 (2) and (4), for existing tank systems regulated under this subsection, owners and operators must complete the assessment of the tank system's integrity by June 1, 1992, and must meet the secondary containment requirements of WAC 173-303-640(4) by January 12, 1993;

(vii) The owner or operator must obtain data, by screening-type analysis if necessary, confirming the designation of each waste stream, such that each dangerous waste received can be effectively recycled without jeopardizing human health or the environment. The owner or operator must verify the waste designation periodically, so that it is accurate and current, but at least once every six months or on a batch basis if shipments of a specific waste stream are less frequent. Copies of all analyses and data must be retained for at least five years and made available to the department upon request.

(d) Owners and 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,

(B) WAC 173-303-800 through 173-303-840,

(C) WAC 173-303-140 (2)(a),

(D) WAC 173-303-120 (4)(e);

(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.

(e) Owners and operators of facilities subject to dangerous waste permitting requirements with dangerous waste management units that recycle hazardous wastes are subject to the requirements of WAC 173-303-690, 173-303-691 (Air emission standards for process vents and equipment leaks), and WAC 173-303-692 (Air emission standards for tanks, surface impoundments, and containers) for final status facilities, and 40 CFR Part 265 Subparts AA, BB, and CC, incorporated by reference at WAC 173-303-400(3) for interim status facilities.

(5) Used oil that is recycled and is also a dangerous waste solely because it exhibits a dangerous waste characteristic or criteria is not subject to the requirements of this chapter except for 40 CFR Part 279 which is incorporated by reference at WAC 173-303-515. Used oil that is recycled includes any used oil that is reused, following its original use, for any purpose (including the purpose for which the oil was

originally used). Such term includes, but is not limited to, oil that is re-refined, reclaimed, burned for energy recovery, or reprocessed.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-120, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-120, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-120, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-120, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 93-02-050 (Order 92-32), § 173-303-120, filed 1/5/93, effective 2/5/93. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-120, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-120, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-120, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-120, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-120, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-120, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-120, filed 2/10/82.]

WAC 173-303-121 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-121, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-121, filed 4/18/84.]

WAC 173-303-130 Containment and control of infectious wastes. (Reserved.)

[Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-130, filed 2/10/82.]

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, will 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 dangerous waste treatment, storage, or disposal facility in Washington state and to any person who generates or transports dangerous waste.

(a) Land disposal restrictions for wastes designated in accordance with WAC 173-303-070 (3)(a)(i), (ii), and (iii) are the restrictions set forth by the Environmental Protection Agency in 40 CFR Part 268 which are incorporated by reference into this regulation and the restrictions set forth in subsections (3) through (7) of this section. The words "regional administrator" (in 40 CFR) will mean the "department," except for 40 CFR Parts 268.5 and 268.6; 268 Subpart B; and 268.42(b). The authority for implementing these excluded CFR sections remains with the U.S. Environmental Protection Agency. The exemption and exception provisions of subsections (3) through (7) of this section are not applicable to the federal land disposal restrictions.

(b) Land disposal restrictions for state-only dangerous waste are the restrictions set forth in subsections (3) through (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) "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.

(c) "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.

(d) "Solid acid waste" means a dangerous waste that exhibits the characteristic of low pH under the corrosivity test of WAC 173-303-090 (6)(a) (iii).

(e) "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 may land dispose of EHW, except as provided in subsection (5) of this section, at any land disposal facility in the state. No person may 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 bulk and containerized liquids.

(i) Effective May 8, 1985, the placement of bulk or nonconainerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited. (40 CFR 264.314(a) which applies prior to May 8, 1985, is incorporated by reference.)

(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 sorbent 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 designed to hold free liquids for use other than storage, such as a battery or capacitor; or

(D) The container is a labpack 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 SW-846 as incorporated by reference in WAC 173-303-110 (3)(a).

(iv) Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are: Materials listed or described in (b)(iv)(A) of this subsection; materials that pass one of the tests in (b)(iv)(B) of this subsection; or materials that are determined by the department to be nonbiodegradable through WAC 173-303-910.

(A) Nonbiodegradable sorbents.

(I) Inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites; calcium carbonate (organic free limestone); oxides/hydroxides, alumina, lime, silica (sand), diatomaceous earth; perlite (volcanic glass); expanded volcanic rock; volcanic ash; cement kiln dust; fly ash; rice hull ash; activated charcoal/activated carbon); or

(II) High molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, crosslinked allylstyrene and tertiary butyl copolymers). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or

(III) Mixtures of these nonbiodegradable materials.

(B) Tests for nonbiodegradable sorbents.

(I) The sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a)-Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or

(II) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b)-Standard Practice for Determining Resistance of Plastics to Bacteria; or

(III) The sorbent material is determined to be nonbiodegradable under OECD (Organization for Economic Cooperation and Development) test 301B: [CO_2 Evolution (Modified Sturm Test)].

(v) Effective November 8, 1985, the placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates to the department, or the department determines, that:

(A) The only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains, or may reasonably be anticipated to contain, hazardous waste; and

(B) Placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in 40 CFR Section 144.3.)

(c) Disposal of solid acid waste. No person may 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.

(d) Disposal of organic/carbonaceous waste.

(i) No person may 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.

(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 subsection and this chapter.

(a) Surface impoundment treatment.

Liquid waste, extremely hazardous waste (EHW), solid acid 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 at closure the owner/operator complies with the prohibitions and restrictions of subsection (4) of this section.

(b) Waste pile treatment.

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.

(c) Land treatment.

Liquid waste, extremely hazardous waste (EHW), and organic/carbonaceous 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.

(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) or (c) 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) 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.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-140, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-140, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-140, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-140, filed 1/5/88, effective 2/5/88; 84-09-088 (Order DE 83-36), § 173-303-140, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-140, filed 2/10/82.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-303-141 Treatment, storage, or disposal of dangerous waste. (1) A person may offer a designated dangerous waste only to a TSD facility which is operating either: Under a permit issued pursuant to the requirements of this chapter; or, if the TSD facility is located outside of this state, under interim status or a permit issued by United States EPA under 40 CFR Part 270, or under interim status or a permit issued by another state which has been authorized by United States EPA pursuant to 40 CFR Part 271.

(2) A person may offer a state only designated dangerous waste (not regulated as a hazardous waste by EPA) to a facility which is located outside of this state and which does not meet the requirements of subsection (1) of this section if:

(a) The facility receiving the waste will legitimately treat or recycle the dangerous waste (disposal is an unacceptable management practice);

(b) The generator has on file a letter or copy of a letter signed by the regulatory authority in the receiving state that the receiving facility may accept the waste;

(c) The generator uses a transporter with a valid EPA/state identification number;

(d) The generator complies with all other applicable requirements, including manifesting, packaging and labeling, with respect to the shipping of the waste. However, the EPA/state identification number for the receiving facility is not required on the manifest or annual report; and

(e) The generator receives from the receiving facility a signed and dated copy of the manifest.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-141, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-141, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-141, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-141, filed 2/10/82.]

WAC 173-303-145 Spills and discharges into the environment. (1) Purpose and applicability. This section sets forth the requirements for any person responsible for a spill or discharge of a dangerous waste or hazardous substance into the environment, except when such release is otherwise permitted under state or federal law. For the purposes of complying with this section, a transporter who spills or discharges dangerous waste or hazardous substances during transportation will be considered the responsible person. This section applies when any dangerous waste or hazardous substance is intentionally or accidentally spilled or discharged into the environment (unless otherwise permitted) such that human health or the environment is threatened, regardless of the quantity of dangerous waste or hazardous substance.

(2) Notification. Any person who is responsible for a spill or nonpermitted discharge must immediately notify the individuals and authorities described for the following situations:

(a) For spills or discharges onto the ground or into groundwater or surface water, notify all local authorities in accordance with the local emergency plan. If necessary, check with the local emergency service coordinator and the fire department to determine all notification responsibilities under the local emergency plan. Also, notify the appropriate regional office of the department of ecology;

(b) For spills or discharges which result in emissions to the air, notify all local authorities in accordance with the local emergency plan. If necessary, check with the local emergency service coordinator and the fire department to determine all notification responsibilities under the local emergency plan. Also, in western Washington notify the local air pollution control authority, or in eastern Washington notify the appropriate regional office of the department of ecology.

(3) Mitigation and control. The person responsible for a spill or nonpermitted discharge must take appropriate immediate action to protect human health and the environment (e.g., diking to prevent contamination of state waters, shutting of open valves).

(a) In addition, the person responsible for a spill or discharge must:

(i) Clean up all released dangerous wastes or hazardous substances, or take such actions as may be required or approved by federal, state, or local officials acting within the scope of their official responsibilities. This may include complete or partial removal of released dangerous wastes or hazardous substances as may be justified by the nature of the released dangerous wastes or hazardous substances, the human and environmental circumstances of the incident, and protection required by the Water Pollution Control Act, chapter 90.48 RCW;

(ii) Designate and treat, store or dispose of all soils, waters, or other materials contaminated by the spill or discharge in accordance with this chapter 173-303 WAC. The department may require testing in order to determine the amount or extent of contaminated materials, and the appropriate designation, treatment, storage, or disposal for any materials resulting from clean-up; and

(iii) If the property on which the spill or discharge occurred is not owned or controlled by the person responsible for the incident, restore the area impacted by the spill or discharge, and replenish resources (e.g., fish, plants) in a manner acceptable to the department.

(b)(i) Where immediate removal, temporary storage, or treatment of spilled or discharged dangerous wastes or hazardous substances is necessary to protect human health or the environment, the department may direct persons to:

(A) Remove it without a manifest, by transporters who do not have EPA/state identification numbers;

(B) Temporarily store it at sites that are protective of human health and the environment and are secure from access by the public; and/or

(C) Treat it to reduce or control the hazards, under WAC 173-303-170.

(ii) When the department seeks to direct persons who are not responsible for a spill or discharge to carry out actions pursuant to this section, it will obtain their concurrence. It is the intent of the department that persons who provide these services may be deemed "good samaritans" under the provisions of chapter 70.136 RCW.

(4) Nothing in WAC 173-303-145 eliminates any obligations to comply with reporting requirements which may exist in a permit or under other state or federal regulations.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-145, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-145, filed 10/19/95, effective 11/19/95; 92-15-036 (Order 91-44), § 173-303-145, filed 7/8/92, effective 8/8/92. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-145, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-145, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-145, filed 2/10/82.]

WAC 173-303-150 Division, dilution, and accumulation. (1) Any action taken to evade the intent of this regulation by dividing or diluting wastes to change their designation shall be prohibited, except for the purposes of treating, neutralizing, or detoxifying such wastes.

(2) Separation of a homogeneous waste into heterogeneous phases (e.g., separation of a suspension into sludge and liquid phases, or of a solvent/water mixture into solvent and water phases, etc.) will not be considered as division, provided that the person generating the waste either:

(a) Designates the homogeneous waste before separation, and handles the entire waste accordingly; or

(b) Designates each phase of the heterogeneous waste, in accordance with the dangerous waste designation requirements of this chapter, and handles each phase accordingly.

(3) For the purposes of designation, quantities of continuously generated wastes must be summed monthly. All wastes generated less frequently than once a month will be considered as batch or single event wastes.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-150, filed 10/19/95, effective 11/19/95; 82-05-023 (Order DE 81-33), § 173-303-150, filed 2/10/82. Formerly WAC 173-302-150.]

WAC 173-303-160 Containers. (1) Waste quantity. Containers and inner liners will not be considered as a part of the waste when measuring or calculating the quantity of a dangerous waste. Only the weight of the residues in nonempty or nonrinsed containers or inner liners will be considered when determining waste quantities.

(2) A container or inner liner is "empty" when:

(a) All wastes in it have been taken out that can be removed using practices commonly employed to remove materials from that type of container or inner liner (e.g., pouring, pumping, aspirating, etc.) and, no more than one inch of waste remains at the bottom of the container or inner liner, or the volume of waste remaining in the container or inner liner is equal to three percent or less of the container's total capacity, or, if the container's total capacity is greater than one hundred ten gallons, the volume of waste remaining in the container or inner liner is no more than 0.3 percent of the container's total capacity. A container which held compressed gas is empty when the pressure inside the container equals or nearly equals atmospheric pressure; and

(b) If the container or inner liner held acutely hazardous waste, as defined in WAC 173-303-040, toxic EHW as defined in WAC 173-303-100 or pesticides bearing the danger or warning label, the container or inner liner has been rinsed at least three times with an appropriate cleaner or solvent. The volume of cleaner or solvent used for each rinsing must be ten percent or more of the container's or inner liner's capacity or of sufficient quantity to thoroughly decontaminate the container. In lieu of rinsing for containers that might be damaged or made unusable by rinsing with liquids (for example, fiber or cardboard containers without inner liners), an empty container may be vacuum cleaned, struck, with the open end of the container up, three times (for example, on the ground, with a hammer or hand) to remove or loosen particles from the inner walls and corners, and vacuum cleaned again. Equipment used for the vacuum cleaning of residues from containers or inner liners must be decontaminated before discarding, in accordance with procedures approved by the department. A container or inner liner is also considered "empty" if the container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal.

Any rinsate or vacuumed residue that results from the cleaning of containers or inner liners must, whenever possible, be reused in a manner consistent with the original intended purpose of the substance in the container or inner liner. In the case of a farmer, if the rinsate is a pesticide residue then the rinsate must be managed or reused in a manner consistent with the application instructions on the pesticide label. On-site disposal or burial of pesticide residues is prohibited. Otherwise, the rinsate must be checked against the designation requirements (WAC 173-303-070 through 173-303-100) and, if designated, managed according to the requirements of this chapter.

(c) In the case of a container, the inner liner, that prevented the container from contact with the commercial chemical product or manufacturing chemical, has been removed.

(3)(a) Any residues remaining in containers or inner liners that are "empty" as described in subsection (2) of this section will not be subject to the requirements of this chapter, and will not be considered as accumulated wastes for the purposes of calculating waste quantities.

(b) Any dangerous waste in either: A container that is not empty, or an inner liner removed from a container that is not empty (as defined in subsection (2) of this section) is subject to the requirements of this chapter.

(4) A person who cannot meet the provisions in (2)(b) of this section may petition the department to approve alternative container rinsing processes in accordance with WAC 173-303-910(1).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-160, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-160, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-160, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-160, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-160, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-160, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-160, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-160, filed 2/10/82. Formerly WAC 173-302-140.]

WAC 173-303-161 Overpacked containers (labpacks). Small containers of dangerous waste may be placed in overpacked drums (or labpacks) provided that the following conditions are met:

(1) Dangerous waste must be packaged in nonleaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. Inside containers must be tightly and securely sealed and, to the extent possible, should be full and have as little air as possible in them to minimize voids. The inside containers must be of the size and type specified in the Department of Transportation (DOT) hazardous materials regulations (49 CFR Parts 173, 178, and 179), if those regulations specify a particular inside container for the waste;

(2) The inside containers must be overpacked in an open head DOT-specification drum shipping container which meets all of the requirements of 49 CFR Parts 173, 178, and 179. The overpack container must not exceed a capacity of 416-liter (110 gallon). The overpack container must have a sufficient quantity of sorbent material to completely sorb all of the liquid contents of the inside containers. The sorbent in overpack containers to be placed in a landfill must be nonbiodegradable in accordance with WAC 173-303-140 (4)(b)(iv).

The outer container must be full after it has been packed with inside containers and sorbent material;

(3) The sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers, in accordance with WAC 173-303-395 (1)(b);

(4) Incompatible wastes, as defined in WAC 173-303-040, must not be placed in the same outside container; and

(5) Reactive wastes, other than cyanide- or sulfide-bearing waste as defined in WAC 173-303-090 (7)(a)(v), must be treated or rendered nonreactive prior to packaging in accordance with subsections (1) through (4) of this section. Cyanide- and sulfide-bearing reactive waste may be packed in accordance with subsections (1) through (4) of this section without first being treated or rendered nonreactive.

(6) An itemized listing of the chemicals, their concentrations and quantities per labpack must be kept by the generator and must be readily available in case of an emergency during shipment, and for the purposes of preparing annual reports under WAC 173-303-220.

(7) Such disposal is in compliance with the requirements of WAC 173-303-140 (2)(a). Persons who incinerate labpacks according to the requirements in 40 CFR 268.42(c)(1) (incorporated by reference at WAC 173-303-140 (2)(a)) may use fiber drums in place of metal outer containers. Such fiber drums must meet the DOT specifications in 49 CFR 173.12 and be overpacked according to the requirements in subsection (2) of this section.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-161, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-161, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-161, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-161, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-161, filed 4/18/84.]

WAC 173-303-170 Requirements for generators of dangerous waste. (1) A person is a dangerous waste generator if their solid waste is designated by the requirements of WAC 173-303-070 through 173-303-100.

(a) The generator is responsible for designating their waste as DW or EHW.

(b) The generator may request an exemption for their dangerous waste according to the procedures of WAC 173-303-072.

(2) A dangerous waste generator must notify the department and obtain an EPA/state identification number as required by WAC 173-303-060, and must comply with the requirements of WAC 173-303-170 through 173-303-230.

(3) Any generator who stores, treats, or disposes of dangerous waste on-site must perform their operations in accordance with the TSD facility requirements with the following exceptions:

(a) Generators who accumulate dangerous wastes for less than ninety days as allowed under WAC 173-303-200 or for less than one hundred eighty days as allowed under WAC 173-303-201 and 173-303-202;

(b) Generators who treat dangerous waste on-site in accumulation tanks, containers, and containment buildings provided that the generator maintains a log showing the date and amount of waste treated and complies with:

(i) The applicable requirements of WAC 173-303-200, 173-303-201, and 173-303-202; and

(ii) WAC 173-303-283(3);

(c) Generators who treat special waste on-site provided:

(i) The accumulation standards of WAC 173-303-073 (2)(a) and (b) are met;

(ii) When treated in units other than tanks or containers, the unit is designed, constructed, and operated in a manner that prevents:

(A) A release of waste and waste constituents to the environment;

(B) Endangerment of health of employees or the public;

(C) Excessive noise;

(D) Negative aesthetic impact on the use of adjacent property.

(iii) The treatment unit must also be inspected routinely for deterioration that would lead to a release and repairs must be conducted promptly.

(4) The generator must comply with the special land disposal restrictions for certain dangerous wastes in WAC 173-303-140.

(5) Persons responding to an explosives or munitions emergency in accordance with WAC 173-303-400 (2)(c)(xii)(A)(IV) or 173-303-600 (3)(p)(i)(D), (3)(p)(iv), or (3)(p)(xii)(D), and WAC 173-303-800 (7)(c)(iv) or (7)(e) are not required to comply with the standards of WAC 173-303-170 through 173-303-230.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-170, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-170, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-170, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-170, filed 1/5/88, effective 2/5/88; 87-14-029 (Order DE-87-4), § 173-303-170, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-170, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-170, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-170, filed 2/10/82.]

WAC 173-303-180 Manifest. Before transporting dangerous waste or offering dangerous waste for transport off the site of generation, the generator must prepare a manifest and must follow all applicable procedures described in this section.

(1) This subsection describes the form and contents of dangerous waste manifests. 40 CFR Part 262 Appendix - Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions) is adopted by reference. The manifest must be EPA Form 8700-22 and, if necessary, EPA Form 8700-22A. The manifest must be prepared in accordance with the instructions for these forms, as described in the uniform manifest Appendix of 40 CFR Part 262, and in addition must contain the following information in the specified shaded items of the uniform manifest:

(a) Item D - The first transporter's telephone number must be provided in this space;

(b) Item F - If a second transporter is used, then the second transporter's telephone number must be provided in this space;

(c) Item H - The designated receiving facility's telephone number must be provided in this space;

(d) Item I, and R if the continuation sheet 8700-22A is used - The dangerous waste number (e.g., F001, D006, WT02) must be provided in this space for each corresponding waste entered and described under Item 11, and 28 if the continuation sheet 8700-22A is used. (Note: The waste code does not have to be entered in this block if it already appears in the corresponding U.S. DOT Description block.) As discussed in subsection (5) of this section, dangerous waste numbers WL01 or WL02 may be used in this space for labpacks;

(e) Item O, (on the continuation sheet 8700-22A) - If a third transporter is used, then the third transporter's telephone number must be provided in this space; and

(f) Item Q, (on the continuation sheet 8700-22A) - If a fourth transporter is used, then the fourth transporter's telephone number must be provided in this space.

(2) The manifest must consist of enough copies to provide the generator, transporter(s), and facility owner/operator with a copy, and a copy for return to the generator.

(3) Manifest procedures.

(a) The generator must:

(i) Sign and date the manifest certification by hand;

(ii) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest; and

(iii) Retain one copy in accordance with WAC 173-303-210, Generator recordkeeping.

(b) The generator must give the remaining manifest copies to the transporter.

(c) If the transporter is unable to deliver the dangerous waste shipment to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste shipment.

(d) For shipments of dangerous waste within the United States solely by water (bulk shipments only), the generator must send three copies of the manifest dated and signed in accordance with this section to the owner or operator of the designated facility or the last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.

(e) For rail shipments of dangerous waste within the United States which originate at the site of generation, the generator must send at least three copies of the manifest dated and signed in accordance with this section to:

(i) The next nonrail transporter, if any; or

(ii) The designated facility if transported solely by rail; or

(iii) The last rail transporter to handle the waste in the United States if exported by rail.

(f) For shipments of federally regulated hazardous waste to a designated facility in an authorized state which has not yet obtained authorization to regulate that particular waste as hazardous, the generator must assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

(4) Special requirements for shipments to the Washington EHW facility at Hanford.

(a) All generators planning to ship dangerous waste to the EHW facility at Hanford must notify the facility in writing and by sending a copy of the prepared manifest prior to shipment.

(b) The generator must not ship any dangerous waste without prior approval from the EHW facility. The state operator may exempt classes of waste from the requirements of WAC 173-303-180 (4)(a) and (b) where small quantities or multiple shipments of a previously approved waste are involved, or there exists an emergency and potential threat to public health and safety.

(5) Special instructions for shipment of labpacks. For purposes of completing the uniform dangerous waste manifest, dangerous waste numbers WL01 (for labpacks containing wastes designated as EHW) or WL02 (for labpacks containing wastes designated only as DW) may be used to complete Items I and R in lieu of the dangerous waste numbers that would otherwise be assigned to the contents of the labpack.

(6) The requirements of this section and WAC 173-303-190(2) do not apply to the transport of dangerous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way: Provided, That ecology has approved an alternative paper tracking system that serves the purpose of a manifest. Notwithstanding WAC 173-303-240(2), the generator or transporter must comply with the requirements for transporters set forth in WAC 173-303-270 and 173-303-145 in the event of a discharge of dangerous waste on a public or private right-of-way.

(7) Special instructions for state-only dangerous waste that designates only by the criteria under WAC 173-303-100 and is not regulated as a hazardous waste under 40 CFR Part 261 or as a hazardous material under the 49 CFR hazardous material regulations. For purposes of completing the uniform hazardous waste manifest, Item 11, and Item 28 if continuation sheet 8700-22A is used, or to describe a state-only dangerous waste on a shipping paper, the shipping description must include the following in sequence with no additional information interspersed:

(a) Material Not Regulated by DOT;

(b) Washington State Dangerous Waste Only followed by the appropriate criteria designation of the waste that is either toxic, persistent, solid corrosive or a combination of these entered in parentheses;

(c) Shipping description examples: Material Not Regulated by DOT (Washington State Dangerous Waste Only, Toxic); Material Not Regulated by DOT (Washington State Dangerous Waste Only, Toxic, Persistent); Material Not Regulated by DOT (Washington State Dangerous Waste Only, Solid Corrosive).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-180, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-180, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-180, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-180, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-180, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-180, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-180, filed 2/10/82. Formerly WAC 173-302-180 and 173-302-190.]

WAC 173-303-190 Preparing dangerous waste for transport. The generator must fulfill the following requirements before transporting off-site or offering for off-site transport any dangerous waste.

(1) Packaging. The generator must package all dangerous waste for transport in accordance with United States DOT regulations on packaging, 49 CFR Parts 173, 178, and 179.

(2) Labeling. The generator must label each package in accordance with United States DOT regulations, 49 CFR Part 172.

(3) Marking. The generator must:

(a) Mark each package of dangerous waste in accordance with United States DOT regulations, 49 CFR Part 172; and

(b) Mark each package containing one hundred ten gallons or less of dangerous waste with the following, or equivalent words and information, displayed in accordance with 49 CFR 172.304:

HAZARDOUS WASTE - State and federal law prohibits improper disposal. If found, contact the nearest police or public safety authority, and the Washington state department of ecology or the United States Environmental Protection Agency.

Generator's Name and Address

. . . . . .

. . . . . .

. . . . . .

Manifest Document Number

. . . . . .

(4) Placarding. The generator will placard, or offer to the initial transporter all appropriate placards in accordance with United States DOT regulations, 49 CFR Part 172, Subpart F.

(5) State-only dangerous waste that is not regulated as a hazardous waste under 40 CFR Part 261 or as a hazardous material under 49 CFR must fulfill the following requirements before transport:

(a) Package in a nonleaking, nonsievable container or in a package that is equivalent to the manufacturing and testing specifications for packagings and containers of 49 CFR Parts 173, 178 and 179.

(b) Mark each package containing one hundred ten gallons or less with the following:

(i) Washington State Dangerous Waste-State law prohibits improper disposal. If found, contact the nearest police or public safety authority, and the Washington State Department of Ecology. The generator's name and address and manifest number must also be included; and

(ii) The state shipping description as described in WAC 173-303-180(7).

(c) Use of any other markings for a state-only dangerous waste is prohibited.

(6) State-only dangerous waste that is also regulated as a hazardous material under 49 CFR must be packaged, labeled and marked in accordance with WAC 173-303-190 (1), (2), (3) and (5)(b)(i).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-190, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-190, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-190, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-190, filed 2/10/82.]

WAC 173-303-200 Accumulating dangerous waste on-site. (1) A generator, not to include transporters as referenced in WAC 173-303-240(3), may accumulate dangerous waste on-site without a permit for ninety days or less after the date of generation, provided that:

(a) All such waste is shipped off-site to a designated facility or placed in an on-site facility which is permitted by the department under WAC 173-303-800 through 173-303-845 or recycled or treated on-site in ninety days or less. The department may, on a case-by-case basis, grant a maximum thirty day extension to this ninety day period if dangerous wastes must remain on-site due to unforeseen, temporary and uncontrollable circumstances. A generator who accumulates dangerous waste for more than ninety days is an operator of a storage facility and is subject to the facility requirements of this chapter and the permit requirements of this chapter as a storage facility unless he has been granted an extension to the ninety day period allowed pursuant to this subsection;

(b)(i) The waste is placed in containers and the generator complies with WAC 173-303-630 (2), (3), (4), (5), (6), (8), (9), (10), and (11). For container accumulation (including satellite areas as described in subsection (2) of this section), the department may require that the accumulation 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 accumulated, or due to a history of spills or releases from accumulated containers. In addition, any new container accumulation areas (but not including new satellite areas, unless required by the department) constructed or installed after September 30, 1986, must comply with the provisions of WAC 173-303-630(7); and/or

(ii) The waste is placed in tanks and the generator complies with WAC 173-303-640 (2) through (11), except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a). (Note: A generator, unless otherwise required to do so, does not have to prepare a closure plan, a cost estimate for closure, or provide financial responsibility for his tank system to satisfy the requirements of this section.) Such a generator is exempt from the requirements of WAC 173-303-620 and 173-303-610, except for WAC 173-303-610 (2) and (5); and/or

(iii) The waste is placed on drip pads and the generator complies with WAC 173-303-675 and maintains the following records at the facility:

(A) A description of procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and

(B) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal; and/or

(iv) The waste is placed in containment buildings and the generator complies with 40 CFR Part 265 Subpart DD, which is incorporated by reference, and the generator has placed its professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101 in

the facility's operating record no later than sixty days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit. The owner or operator shall maintain the following records at the facility:

(A) A written description of procedures to ensure that each waste volume remains in the unit for no more than ninety days, a written description of the waste generation and management practices for the facility showing that they are consistent with respecting the ninety-day limit, and documentation that the procedures are complied with; or

(B) Documentation that the unit is emptied at least once every 90 days.

In addition, such a generator is exempt from all the requirements in WAC 173-303-610 and 173-303-620, except for WAC 173-303-610(2).

(c) The date upon which each period of accumulation begins is marked and clearly visible for inspection on each container;

(d) While being accumulated on site, each container and tank is labeled or marked clearly with the words "dangerous waste" or "hazardous waste." Each container or tank must also be marked with a label or sign which identifies the major risk(s) associated with the waste in the container or tank for employees, emergency response personnel and the public (Note—If there is already a system in use that performs this function in accordance with local, state, or federal regulations, then such system will be adequate). The department may also require that a sign be posted at each entrance to the accumulation area, bearing the legend, "danger—unauthorized personnel keep out," or an equivalent legend, written in English, and legible from a distance of twenty-five feet or more; and

(e) The generator complies with the requirements for facility operators contained in:

(i) WAC 173-303-330 through 173-303-360 (personnel training, preparedness and prevention, contingency plan and emergency procedures, and emergencies) except for WAC 173-303-355 (SARA Title III coordination); and

(ii) WAC 173-303-320 (1), (2)(a), (b), (d), and (3) (general inspection); and

(f) The generator complies with 40 CFR 268.7(a)(5).

(2) Satellite accumulation.

(a) A generator may accumulate as much as fifty-five gallons of dangerous waste or one quart of acutely hazardous waste per waste stream in containers at or near any point of generation where waste initially accumulates (defined as a satellite accumulation area in WAC 173-303-040). The satellite area must be under the control of the operator of the process generating the waste or secured at all times to prevent improper additions of wastes to a satellite container. Satellite accumulation is allowed without a permit provided the generator:

(i) Complies with WAC 173-303-630 (2), (4), (5) (a) and (b), (8)(a), and (9) (a) and (b); and

(ii) Complies with subsection (1)(d) of this section.

(b) When fifty-five gallons of dangerous waste or one quart of acutely hazardous waste is accumulated per waste stream, the container(s) must be marked immediately with the accumulation date and moved within three days to a designated storage or accumulation area.

(c) On a case-by-case basis the department may require the satellite area to be managed in accordance with all or some of the requirements under subsection (1) of this section, if the nature of the wastes being accumulated, a history of spills or releases from accumulated containers, or other factors are determined by the department to be a threat or potential threat to human health or the environment.

(3) For the purposes of this section, the ninety-day accumulation period begins on the date that:

(a) The generator first generates a dangerous waste; or

(b) The quantity (or aggregated quantity) of dangerous waste being accumulated by a small quantity generator first exceeds the accumulation limit for such waste (or wastes); or

(c) Fifty-five gallons of dangerous waste or one quart of acutely hazardous waste, per waste stream, is accumulated in a satellite accumulation area.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-200, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-200, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-200, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-200, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-200, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-200, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-200, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-200, filed 2/10/82.]

WAC 173-303-201 Special accumulation standards. (1) This section applies to persons who generate more than 220 pounds but less than 2200 pounds per calendar month and do not accumulate on-site more than 2200 pounds of dangerous waste. The special provisions of this section do not apply to acutely hazardous wastes or Toxic EHW (WT01) that exceed the QEL that are being generated or accumulated by the generator.

(2) For purposes of accumulating dangerous waste on-site, persons who generate no more than 2200 pounds per month or who accumulate on-site no more than 2200 pounds of dangerous waste at any one time 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);

(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;

(d) For waste that is placed in tanks, generators must comply with WAC 173-303-202 in lieu of WAC 173-303-200 (1)(b);

(e) The generator must comply with WAC 173-303-630 (1), (2), (4), (5), (6), and (9). The generator does not need to comply with 40 CFR Part 265.176 and 178.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-201, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-201, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-201, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-201, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-201, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-201, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-201, filed 6/3/86.]

WAC 173-303-202 Special requirements for generators of between two hundred twenty and two thousand two hundred pounds per month that accumulate dangerous waste in tanks. (1) This section applies to generators of more than two hundred twenty pounds but less than two thousand two hundred pounds of dangerous waste in a calendar month, that accumulate dangerous waste in tanks for less than one hundred eighty days (or two hundred seventy days if the generator must ship the waste greater than two hundred miles), and do not accumulate over two thousand two hundred pounds on-site at any time.

(2) Generators of between two hundred twenty and two thousand two hundred pounds per month of dangerous waste must comply with the following general operating requirements:

(a) Treatment or storage of dangerous waste in tanks must comply with WAC 173-303-395(1).

(b) Dangerous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life.

(c) Uncovered tanks must be operated to ensure at least sixty centimeters (two feet) of freeboard, unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top sixty centimeters (two feet) of the tank.

(d) Where dangerous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow (e.g., waste feed cutoff system or by-pass system to a standby tank).

Note: These systems are intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., a malfunction in the treatment process, a crack in the tank, etc.).

(3) Generators of between two hundred twenty and two thousand two hundred pounds per month accumulating dangerous waste in tanks must inspect, where present:

(a) Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that it is in good working order;

(b) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design;

(c) The level of waste in the tank at least once each operating day to ensure compliance with subsection (2)(c) of this section;

(d) The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams; and

(e) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes,) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

Note: As required by WAC 173-303-320(3), the owner or operator must remedy any deterioration or malfunction he finds.

(4) Generators of between two hundred twenty and two thousand two hundred pounds per month accumulating dangerous waste in tanks must, upon closure of the facility, remove all dangerous waste from tanks, discharge control equipment, and discharge confinement structures.

Note: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with WAC 173-303-070 (2)(a) or (b), that any solid waste removed from his tank is not a dangerous waste, the owner or operator becomes a generator of dangerous waste and must manage it in accordance with all applicable requirements of this chapter.

(5) Generators of between two hundred twenty and two thousand two hundred pounds per month must comply with the following special requirements for ignitable or reactive waste:

(a) Ignitable or reactive waste must not be placed in a tank, unless:

(i) The waste is treated, rendered, or mixed before or immediately after placement in a tank so that:

(A) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090 (5) or (7) of this chapter; and

(B) WAC 173-303-395(1) is complied with; or

(ii) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

(iii) The tank is used solely for emergencies.

(b) The owner or operator of a facility which treats or stores ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981).

(6) Generators of between two hundred twenty and two thousand two hundred pounds per month must comply with the following special requirements for incompatible wastes:

(a) Incompatible wastes, or incompatible wastes and materials, (see 40 CFR Part 265 Appendix V for examples) must not be placed in the same tank, unless WAC 173-303-395(1) is complied with.

(b) Dangerous waste must not be placed in an unwashed tank which previously held an incompatible waste or material, unless WAC 173-303-395(1) is complied with.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-202, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-202, filed 1/4/89.]

WAC 173-303-210 Generator recordkeeping. (1) The generator must keep a copy of each manifest signed by the initial transporter in accordance with WAC 173-303-180(3), manifest procedures, for three years, or until he receives a signed copy from the designated facility which received the waste. The signed facility copy must be retained for at least five years from the date the waste was accepted by the initial transporter.

(2) The generator must keep a copy of each annual report and exception report as required by WAC 173-303-220 for a period of at least five years from the due date of each report. The generator must keep a copy of his most recent notification (Form 2) until he is no longer defined as a generator under this chapter.

(3) Waste designation records.

(a) The generator must keep records of any test results, waste analyses, or other determinations made in accordance with WAC 173-303-170(1) for designating dangerous waste for at least five years from the date that the waste was last transferred for on-site or off-site treatment, storage, or disposal.

(b) At a minimum, test results must include:

(i) The sample source, sampling date, and sampling procedure used;

(ii) The laboratory performing the test;

(iii) The testing date, and testing method used;

(iv) The analytical result, or the quantitative range of the testing method for analytes not detected.

(4) Any other records required for generators accumulating wastes on-site as described in WAC 173-303-200 or 173-303-201 must be retained for at least five years, including, but not limited to such items as inspection logs.

(5) The periods of retention for any records described in this section will be automatically extended during the course of any unresolved enforcement action requiring those records or upon request by the director.

(6) All generator records, including plans required by this chapter, will be made available and furnished upon request by the director.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-210, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-210, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-210, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-210, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-210, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-210, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-210, filed 2/10/82.]

WAC 173-303-220 Generator reporting. The generator must 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 must submit an annual report to the department, on the Dangerous Waste Annual Report 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 must 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 (including engineering reports, plans, and specifications) concerning the quantities and disposition of the generator's dangerous waste.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-220, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-220, filed 3/7/91, effective 4/7/91. 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; 84-09-088 (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 at 40 CFR 262 Subpart E and 40 CFR 261.5, 261.6, 262.41, and 263.20 and specify the procedures applicable to generators and transporters of hazardous waste (as defined in WAC 173-303-040). These requirements are incorporated by reference. Copies of any forms or reports submitted to the administrator of United States EPA as required by 40 CFR 262 Subpart E must 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 must 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 must be used; and

(b) In place of the generator's signature on the certification statement, the United States importer or his agent must sign and date the certification and obtain the signature of the initial transporter.

(c) A person who imports hazardous waste must obtain the manifest form from the consignment state if the state supplies the manifest and requires its use. If the consignment state does not supply the manifest form, then the manifest form may be obtained from any source.

(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 will not be treated as a generator or as a facility owner/operator if the containers are empty as defined in WAC 173-303-160(2), and either:

(a) The rinsate is not a dangerous waste under this chapter; or

(b) He reuses the rinsate in a manner consistent with the original product or, if he is a farmer and the rinsate contains pesticide residues, he reuses or manages the rinsate in a manner consistent with the instructions on the pesticide label, provided that when the label instructions specify disposal or burial, such disposal or burial must be on the farmer's own (including rented, leased or tenanted) property.

(4) Tank cars. A person rinsing out dangerous waste tote tanks, truck or railroad tank cars must handle the rinsate according to this chapter, and according to chapter 90.48 RCW, Water pollution control.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-230, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-230, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-230, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-230, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-230, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-230, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-230, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-230, filed 2/10/82.]

WAC 173-303-240 Requirements for transporters of dangerous waste. (1) Applicability. This section establishes standards that apply to persons transporting dangerous waste and transporters who own or lease and operate a transfer facility.

(2) A transporter must have a current EPA/state ID#. Transporters must comply with the notification and identification requirements of WAC 173-303-060. A transporter who has previously obtained an EPA/state ID# in another state is not required to obtain a new ID# when operating in Washington state. Transporters who must comply with the generator requirements as a result of a spill at a transfer facility or during transport must obtain a separate generator EPA/state ID# for the spill.

(3) Any person who transports a dangerous waste must comply with the requirements of WAC 173-303-240 through 173-303-270, when the dangerous waste must be manifested in accordance with WAC 173-303-180.

(4) Any person who transports a dangerous waste must 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.

(5) These requirements do not apply to on-site (as defined in WAC 173-303-040) transportation of dangerous waste by generators, or by owners or operators of permitted TSD facilities.

(6) Transfer facility. The requirements of this subsection apply to a transporter or marine terminal operator who owns or leases and operates a transfer facility. Transfer of a shipment of dangerous waste from one transport vehicle to another transport vehicle, from one container to another container, and from one transporter to another transporter and

any ten-day storage activities may only occur at a transfer facility that is registered with the department. A transporter may store manifested shipments of dangerous waste in containers meeting the requirements of WAC 173-303-190 (1), (2), (3), and (5) for ten days or less at a transfer facility: Provided, That he or she complies with the following:

(a) A transporter who owns or leases and operates a transfer facility within Washington that is related to their dangerous waste transportation activities must register with the department. Washington registration is not required for a transporter whose activities are limited to passing through Washington with shipments of dangerous waste or picking up shipments from Washington generators or delivering shipments to designated treatment, storage or disposal facilities. In order to obtain registration, a transporter must complete a Notification of Dangerous Waste Activities Form 2 per Form 2 instructions and submit it to the department;

(b) Maintains ten-day storage records that include the dates that a manifested shipment of dangerous waste entered the facility and departed the facility. The ten-day records must be retained for a period of three years from the date the shipment was transported from the transfer facility;

(c) WAC 173-303-310 (1) and (2), Security. Instead of WAC 173-303-310(2) for an enclosed or an open flatbed transport vehicle parked at a transfer facility that has no twenty-four-hour surveillance system or natural or artificial barrier, the transport vehicle must meet the placarding requirements of 49 CFR Part 172 and be secured (that is, locked) or the shipment must be transferred to a secured area of the facility to prevent unknowing entry and minimize unauthorized entry;

(d) WAC 173-303-320, General inspection. Instead of keeping inspection records for a period of five years from the date of inspection in WAC 173-303-320 (2)(d), inspection records must be kept at the transfer facility for one year from the date of inspection;

(e) WAC 173-303-330, Personnel training;

(f) WAC 173-303-340, Preparedness and prevention except WAC 173-303-340(3), Aisle space;

(g) WAC 173-303-350, Contingency plan and emergency procedures;

(h) WAC 173-303-360, Emergencies;

(i) WAC 173-303-630 (2), (3), (4), (5)(a) and (b), (8), (9)(a) and (b) and (10), Use and management of containers;

(j) WAC 173-303-630(7) in areas where waste is transferred from container to container and in areas where containers are stored outside in the weather. The secondary containment system must be completed by October 15, 2001. The department may, on a case-by-case basis, grant an extension to the required completion date if the transporter has a design and has entered into binding financial or other agreements for construction prior to October 15, 2001;

(k) The requirements of WAC 173-303-630(7) may be required in areas other than those described in WAC 173-303-240 (6)(j) if the department determines that there is a potential threat to public health and the environment due to the nature of the wastes being stored or due to a history of spills or releases from waste stored in containers.

(7) Transporter exemptions. A transporter will not be required to comply with the following:

(a) The requirements of WAC 173-303-240(6) in the event of an emergency or other unforeseen event beyond the reasonable control of the transporter during transit over public highway, rail track or water route and the waste shipment is loaded, reloaded or transferred to another transport vehicle or container to facilitate transportation;

(b) The requirements of WAC 173-303-240 (6)(i) and (j) for dangerous waste that is stored in a secured, enclosed transport vehicle, intermodal container or portable tank during the time it is parked at a transfer facility;

(c) The requirements of WAC 173-303-240 (6)(i) and (j) for a transfer facility that is located at a pier, dock or barge unloading facility and associated with the loading and unloading of water vessels: Provided, That the dangerous waste shipment is stored within a transport unit, as defined under 49 CFR Part 176, and accepted by the approval authority of the United States Coast Guard;

(d) The requirements of WAC 173-303-240 (6)(j) for dangerous waste that is stored within a building: Provided, That the floor is compatible with and sufficiently impervious to the waste stored and is designed and operated so that any release or spill will be captured within the building and will prevent any waste from migrating to the soil, ground water or surface water.

(8) A transporter who accumulates or stores manifested shipments of dangerous waste for more than ten days at a transfer facility is subject to the dangerous waste management facility general requirements and permit requirements of this chapter with respect to the storage of those wastes.

(9) Reference to WAC 173-303-200 in WAC 173-303-240(4) does not constitute authority for storage in excess of ten days for a transporter who owns or leases and operates a transfer facility.

(10) The regulations in WAC 173-303-250 through 173-303-260 do not apply to transportation during an explosives or munitions emergency response, conducted in accordance with WAC 173-303-400 (2)(c)(xiii)(A)(IV) or (xiii)(D) or WAC 173-303-600 (3)(p)(i)(D) or (3)(p)(iv), and WAC 173-303-800 (7)(c)(i)(C) or (D).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-240, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-240, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-240, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-240, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-240, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-240, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-240, filed 2/10/82. Formerly WAC 173-302-210.]

WAC 173-303-250 Dangerous waste acceptance, transport, and delivery. (1) A transporter must not accept dangerous waste from a generator unless it is accompanied by a manifest signed by the generator in accordance with WAC 173-303-180, Manifest.

(2) Before transporting a dangerous waste shipment, the transporter must sign and date the manifest, acknowledging acceptance of the dangerous waste. The transporter shall return a signed copy to the generator before commencing transport.

(3) The transporter must insure that the manifest accompanies the dangerous waste shipment.

(4) A transporter who delivers a dangerous waste to another transporter, or to the designated facility must:

(a) Obtain the date of delivery and the handwritten signature of that transporter or designated facility owner/operator on the manifest;

(b) Retain one copy of the manifest in accordance with WAC 173-303-260, Transporter recordkeeping; and

(c) Give the remaining copies of the manifest to the accepting transporter or designated facility.

(5) The transporter must deliver the entire quantity of dangerous waste which he has accepted from a generator or a transporter to:

(a) The designated facility listed on the manifest; or

(b) The alternate designated facility, if the dangerous waste cannot be delivered to the designated facility because an emergency prevents delivery; or

(c) The next designated transporter; or

(d) The place outside the United States designated by the generator.

(6) If the dangerous waste cannot be delivered in accordance with subsection (5) of this section, the transporter must contact the generator for further directions, and must revise the manifest according to the generator's instructions.

(7) The requirements of subsections (3), (4), and (8) of this section do not apply to water (bulk shipment) transporters if:

(a) The dangerous waste is delivered by water (bulk shipment) to the designated facility;

(b) A shipping paper containing all the information required on the manifest (excluding the EPA/state identification numbers, generator certification, and signatures) accompanies the dangerous waste;

(c) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper;

(d) The person delivering the dangerous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and

(e) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with WAC 173-303-260(2).

(8) For shipments involving rail transportation, the requirements of subsections (3), (4), and (7) of this section do not apply and the following requirements do apply.

(a) When accepting dangerous waste from a nonrail transporter, the initial rail transporter must:

(i) Sign and date the manifest acknowledging acceptance of the dangerous waste;

(ii) Return a signed copy of the manifest to the nonrail transporter;

(iii) Forward at least three copies of the manifest to:

(A) The next nonrail transporter, if any; or

(B) The designated facility, if the shipment is delivered to that facility by rail; or

(C) The last rail transporter designated to handle the waste in the United States;

(iv) Retain one copy of the manifest and rail shipping paper in accordance with WAC 173-303-260(2).

(b) Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the EPA/state identification numbers, generator certification, and signatures) accompanies the dangerous waste at all times.

(c) When delivering dangerous waste to the designated facility, a rail transporter must:

(i) Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and

(ii) Retain a copy of the manifest or signed shipping paper in accordance with WAC 173-303-260(2).

(d) When delivering dangerous waste to a nonrail transporter a rail transporter must:

(i) Obtain the date of delivery and the handwritten signature of the next nonrail transporter on the manifest; and

(ii) Retain a copy of the manifest in accordance with WAC 173-303-260(2).

(e) Before accepting dangerous waste from a rail transporter, a nonrail transporter must sign and date the manifest and provide a copy to the rail transporter.

(9) Transporters who transport dangerous waste out of the United States must:

(a) Indicate on the manifest the date the dangerous waste left the United States;

(b) Sign the manifest and retain one copy in accordance with WAC 173-303-260(3), Transporter recordkeeping; and

(c) Return a signed copy of the manifest to the generator.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-250, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-250, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-250, filed 2/10/82. Formerly WAC 173-302-220 and 173-302-230.]

WAC 173-303-260 Transporter recordkeeping. (1) A transporter of dangerous waste must keep a copy of the manifest signed by the generator, himself, and the next designated transporter or the owner or operator of the designated facility for a period of three years from the date the dangerous waste was accepted by the initial transporter.

(2) Water (bulk shipment) and rail transporter recordkeeping.

(a) For shipments delivered to the designated facility by rail or water (bulk shipment), each rail or water (bulk shipment) transporter must retain a copy of a shipping paper containing all the information required on a manifest (excluding the EPA/state identification numbers, generator certification, and signatures) for a period of three years from the date the dangerous waste was accepted by the initial transporter.

(b) For shipments of dangerous waste by rail within the United States:

(i) The initial rail transporter must keep a copy of the manifest and shipping paper with all the information required on a manifest (excluding the EPA/state identification numbers, generator certification, and signatures) for a period of three years from the date the dangerous waste was accepted by the initial transporter; and

(ii) The final rail transporter must keep a copy of the signed manifest (or the shipping paper if signed by the designated facility in lieu of the manifest) for a period of three years from the date the dangerous waste was accepted by the initial transporter.

(3) A transporter who transports dangerous waste out of the United States must keep a copy of the manifest, indicating that the dangerous waste left the United States, for a period of three years from the date the dangerous waste was accepted by the initial transporter.

(4) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the director.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-260, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-260, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-260, filed 2/10/82.]

WAC 173-303-270 Discharges during transport. In the event of a spill or discharge of dangerous waste during transportation, the transporter must comply with the requirements of WAC 173-303-145, Spills and discharges into the environment. In addition to the notices required by WAC 173-303-145, the transporter must provide the following notifications:

(1) Give notice to the generator of the waste that a discharge has occurred;

(2) Give notice to the National Response Center (800-424-8802 or 202-426-2675), if required by 49 CFR 171.15;

(3) Report in writing as required by 49 CFR 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington D.C., 20590; and,

(4) For a water (bulk shipment) transporter, give the same notice as required by 33 CFR 153.203 for oil and hazardous substances.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-270, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-270, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-270, filed 2/10/82.]

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. Whenever a shipment of dangerous waste is initiated from a facility, the owner or operator of that facility must 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 must 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.

(5) Salt dome formations, salt bed formations, underground mines and caves. The placement of any noncontainerized or bulk liquid dangerous waste in any salt dome formation, salt bed formation, underground mine or cave is prohibited.

(6) The requirements of WAC 173-303-290 through 173-303-360 and WAC 173-303-395 do not apply to cleanup-only facilities. Instead, owners/operators of cleanup-only facilities must comply with the following requirements.

(a) Obtain an EPA/state identification number in accordance with WAC 173-303-060(2).

(b) Obtain a detailed chemical and physical analysis of a representative sample of the dangerous remediation waste to be treated, stored or disposed at the site. At a minimum, this analysis must contain all information that must be known to treat, store or dispose of the dangerous remediation waste according to WAC 173-303-140 (2)(a), 173-303-280 through 173-303–395 and WAC 173-303-600 through 173-303-695 and must be kept accurate and up to date.

(c) Prevent people who are unaware of the danger from entering, and minimize the possibility for unauthorized people or livestock to enter onto the active portion of the remediation waste management site, unless the owner or operator can demonstrate to the director that:

(i) Physical contact with the dangerous remediation waste, structures or equipment within the active portion of the remediation waste management site will not injure people or livestock who may enter the active portion of the remediation waste management site; and

(ii) Disturbance of the dangerous remediation waste or equipment by people or livestock who enter onto the active portion of the remediation waste management site will not cause a violation of the requirements of WAC 173-303-280 through 173-303-395 or WAC 173-303-600 through 173-303-695.

(d) Inspect the remediation waste management site for malfunctions, deterioration, operator errors, and discharges that may lead to a release of dangerous constituents to the environment or a threat to human health. Inspections must be conducted often enough to identify problems in time to correct them before they harm human health or the environment. Problems must be remedied before they lead to a human health or environmental threat. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

(e) Provide personnel with classroom or on-the-job training on how to perform their duties in a way that ensures the remediation waste management site complies with the requirements of WAC 173-303-280 through 173-303–395 and WAC 173-303-600 through 173-303-695 and on how to effectively respond to emergencies.

(f) Take precautions to prevent accidental ignition or reaction of ignitable or reactive dangerous remediation waste

and prevent threats to human health and the environment from ignitable, reactive and incompatible dangerous remediation waste.

(g) Develop and maintain a construction quality assurance program for all surface impoundments, waste piles and landfill units that are required to comply with WAC 173-303-650 (2)(j) and (k), 173-303-660 (2)(j) and (k) or 173-303-655 (2)(h), (i) and (j). The construction quality assurance must meet the requirements of WAC 173-303-335.

(h) Develop and maintain procedures to prevent accidents and a contingency and emergency plan to control accidents that occur. The procedures must address proper design, construction, maintenance and operation of remediation waste management units at the site. The goal of the plan must be to minimize the possibility of, and the hazards from, a fire, explosion or any other unplanned sudden or nonsudden release of dangerous remediation waste or dangerous constituents to the air, soil or surface water that could threaten human health or the environment. The plan must explain specifically how to treat, store or dispose of the remediation waste in question and must be implemented immediately whenever a fire, explosion or release of dangerous remediation waste or dangerous constituents occurs and could threaten human health or the environment.

(i) Designate at least one employee, either on the remediation waste management site premises or on call (that is, available to respond to an emergency by reaching the remediation waste management site quickly), to coordinate all emergency response measures. The emergency coordinator must be thoroughly familiar with all aspects of the remediation waste management site contingency plan, all operations and activities at the site, the location and characteristics of dangerous remediation waste handled, the location of all records within the site, and the site layout. The emergency coordinator must have authority to commit the resources needed to carry out the contingency plan.

(j) Develop, maintain and implement a plan to meet the requirements of this subsection.

(k) Maintain records documenting compliance with this subsection.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-280, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-280, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-280, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-280, filed 1/5/88, effective 2/5/88; 87-14-029 (Order DE-87-4), § 173-303-280, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-280, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-280, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-280, filed 2/10/82.]

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 criteria.

(2) Applicability. This section applies to owners/operators of proposed facilities. This section also applies to existing facilities applying for a significant expansion, as defined in WAC 173-303-282(3). This section does not apply to owners/operators of facilities or portions of facilities who are 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 owners/operators of facilities operating under an emergency permit pursuant to WAC 173-303-804 or to persons at facilities conducting onsite cleanup of sites under the Comprehensive Environmental Response Compensation and Liability Act, Sections 3004(u), 3004(v), and 3008(h) of the Resource Conservation and Recovery Act, chapter 70.105 RCW, or chapter 70.105D RCW, provided the cleanup activities are being conducted under a consent decree, agreed order, or enforcement order, or is being conducted by the department or United States Environmental Protection Agency. As used in this section:

(a) "Proposed facility" means a facility which has not qualified for interim status under WAC 173-303-805 or for which the department has not issued a final facility permit under WAC 173-303-806 prior to the effective date of this section;

(b) "Existing facility" means a facility which has qualified for interim status under WAC 173-303-805 or for which the department has issued a final facility permit under WAC 173-303-806 prior to the effective date of this section; and

(c) "Expansion" means the enlargement of the land surface area of an existing facility from that described in an interim status permit application or final 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.

(3) Notice of intent to file for an interim status or a dangerous waste permit.

(a) The notice of intent to be prepared by the owners/operators of the applicable facilities must 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) Demonstration of compliance with the siting criteria as required under WAC 173-303-282 (6) and (7). The site conditions with regards to satisfying the criteria are to be assessed as of the date of submittal of the notice of intent to the department;

(vi) 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 must 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;

(vii) For informational purposes the need for the proposed facility or expansion must 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 must 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 must be filed with the department, and copies must be made available for public review, no less than one hundred fifty days prior to filing an application for a permit or permit revision. The department will send a copy of the notice of intent to the elected officials of the lead local government and all local governments within the potentially affected area as required by WAC 173-303-902 (5)(b)(i). The department will continue to coordinate with interested local governments throughout the review of the proposal.

(c) Reserved.

(4) Preapplication public meeting and notice.

(a) Applicability. The requirements of subsections (4), (5), and (6) of this section apply to all final facility (part B) applications seeking initial permits for dangerous waste management units over which the department has permit issuance authority. These requirements also apply to final facility part B applications seeking renewal of permits for such units, where the renewal application is proposing a significant change in facility operations. For the purposes of these subsections, a "significant change" is any change that would qualify as a class 3 permit modification under WAC 173-303-840(4). For the purposes of these subsections only, "dangerous waste management units over which the department has permit issuance authority" refers to dangerous waste management units for which the department has been authorized to issue dangerous waste permits. The requirements of these subsections do not apply to permit modifications under WAC 173-303-840(4) or to applications that are submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

The applicant's meeting date must be coordinated with and approved by ecology. If timing allows, both the applicant and ecology's meetings may be held on the same day.

(b) Prior to the submission of a part B final facility permit application for a facility, the applicant must hold at least one meeting with the public in order to solicit questions from the community and inform the community of proposed dangerous waste management activities. The applicant must post a sign-in sheet or otherwise provide a voluntary opportunity for attendees to provide their names and addresses.

(c) The applicant must submit a summary of the meeting, along with the list of attendees and their addresses developed under (b) of this subsection, and copies of any written comments or materials submitted at the meeting, to the department as a part of the part B application, in accordance with WAC 173-303-806 (4)(a).

(d) The applicant must provide public notice of the preapplication meeting at least thirty days prior to the meeting. The applicant must maintain, and provide to the department upon request, documentation of the notice.

(i) The applicant must provide public notice in all of the following forms:

(A) A newspaper advertisement. The applicant must publish a notice, fulfilling the requirements in (d)(ii) of this subsection, in a newspaper of general circulation in the county or equivalent jurisdiction that hosts the proposed location of the facility. In addition, the department will instruct the applicant to publish the notice in newspapers of general circulation in adjacent counties, where the department determines that such publication is necessary to inform the affected public. The notice must be published as a display advertisement.

(B) A visible and accessible sign. The applicant must post a notice on a clearly marked sign at or near the facility, fulfilling the requirements in (d)(ii) of this subsection. If the applicant places the sign on the facility property, then the sign must be large enough to be readable from the nearest point where the public would pass by the site.

(C) A broadcast media announcement. The applicant must broadcast a notice, fulfilling the requirements in (d)(ii) of this subsection, at least once on at least one local radio station or television station. The applicant may employ another medium with prior approval of the department.

(D) A notice to the department. The applicant must send a copy of the newspaper notice to the department and to the appropriate units of state and local government, in accordance with WAC 173-303-840 (3)(e)(i)(E).

(ii) The notices required under (d)(i) of this subsection must include:

(A) The date, time, and location of the meeting;

(B) A brief description of the purpose of the meeting;

(C) A brief description of the facility and proposed operations, including the address or a map (e.g., a sketched or copied street map) of the facility location;

(D) A statement encouraging people to contact the facility at least seventy-two hours before the meeting if they need special access to participate in the meeting; and

(E) The name, address, and telephone number of a contact person for the applicant.

(5) Public notice requirements at the application stage.

(a) Applicability. The requirements of this section apply to all final facility part B applications seeking initial permits for dangerous waste management units over which the department has permit issuance authority. The requirements of this section also apply to final facility part B applications seeking renewal of permits for such units under WAC 173-

303-806 (7)(a). For the purposes of this section only, "dangerous waste management units over which the department has permit issuance authority" refers to dangerous waste management units for which the department has been authorized to issue final facility permits. The requirements of this section do not apply to permit modifications under WAC 173-303-830(4) or permit applications submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

(b) Notification at application submittal.

(i) The department will provide public notice as set forth in WAC 173-303-840 (3)(e)(i)(D), and notice to appropriate units of state and local government as set forth in WAC 173-303-840 (3)(e)(i)(E), that a part B permit application has been submitted to the department and is available for review.

(ii) The notice will be published within a reasonable period of time after the application is received by the department. The notice must include:

(A) The name and telephone number of the applicant's contact person;

(B) The name and telephone number of the department's contact, and a mailing address to which information, opinions, and inquiries may be directed throughout the permit review process;

(C) An address to which people can write in order to be put on the facility mailing list;

(D) The location where copies of the permit application and any supporting documents can be viewed and copied;

(E) A brief description of the facility and proposed operations, including the address or a map (for example, a sketched or copied street map) of the facility location on the front page of the notice; and

(F) The date that the application was submitted.

(iii) Concurrent with the notice required under (b) of this subsection, the department will place the permit application and any supporting documents in a location accessible to the public in the vicinity of the facility or at the department's office.

(6) Information repository.

(a) Applicability. The requirements of this section apply to all applications seeking final facility permits for dangerous waste management units over which the department has permit issuance authority. For the purposes of this section only, "dangerous waste management units over which the department has permit issuance authority" refers to dangerous waste management units for which the department has been authorized to issue dangerous waste permits.

(b) The department may assess the need, on a case-by-case basis, for an information repository. When assessing the need for an information repository, the department will consider a variety of factors, including: The level of public interest; the type of facility; the presence of an existing repository; and the proximity to the nearest copy of the administrative record. If the department determines, at any time after submittal of a permit application, that there is a need for a repository, then the department will notify the facility that it must establish and maintain an information repository. (See WAC 173-303-810(16) for similar provisions relating to the information repository during the life of a permit.)

(c) The information repository must contain all documents, reports, data, and information deemed necessary by the department to fulfill the purposes for which the repository is established. The department will have the discretion to limit the contents of the repository.

(d) The information repository must be located and maintained at a site chosen by the facility. If the department finds the site unsuitable for the purposes and persons for which it was established, due to problems with the location, hours of availability, access, or other relevant considerations, then the department will specify a more appropriate site.

(e) The department will specify requirements for informing the public about the information repository. At a minimum, the department will require the facility to provide a written notice about the information repository to all individuals on the facility mailing list.

(f) The facility owner/operator will be responsible for maintaining and updating the repository with appropriate information throughout a time period specified by the department. The department may close the repository at its discretion, based on the factors in (b) of this subsection.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-281, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-281, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-281, filed 12/8/93, effective 1/8/94. Statutory Authority: RCW 43.21A.080 and 70.105.210, et seq. 90-20-016, § 173-303-281, filed 9/21/90, effective 10/22/90. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-281, filed 9/6/88.]

WAC 173-303-282 Siting criteria. (1) **Purpose.** This section establishes siting criteria which serve as an initial screen in the consideration of sites for dangerous waste management facilities. The purpose of the siting criteria is to immediately disqualify proposed dangerous waste facility sites in locations considered unsuitable or inappropriate for the management of dangerous wastes. Under RCW 70.105.-200 (1)(d), siting criteria cannot prevent existing dangerous waste management facilities from operating at or below their present level of activity.

A proposed site which is not disqualified under these criteria will be further studied to determine if it qualifies under site specific rules. Compliance with the siting criteria does not imply that a given project at a given location poses an acceptable level of risk, nor does it commit the department to the issuance of a dangerous waste permit. Projects that demonstrate compliance with the siting criteria will be subjected to comprehensive environmental and technical review pursuant to applicable laws and regulations before the department makes a final decision on a dangerous waste permit.

The department may deny a permit or require protective measures such as engineering enhancements or increased setback distances from resources in order to ensure protection of human health and the environment.

(2) **Applicability.**

(a) Except as otherwise specifically provided, this section applies to:

(i) Owners/operators of proposed facilities; and

(ii) Owners or operators of existing land-based facilities at which an expansion of the land based unit is proposed;

(iii) Owners or operators of existing incinerators at which an expansion is proposed; and

(iv) Owners or operators proposing a significant expansion of other existing dangerous waste management facilities not subject to (a)(i), (ii) and (iii) of this subsection, unless the owner/operator can demonstrate to the satisfaction of the department that the proposed expansion will provide a net increase in protection to human health and the environment beyond that which is currently provided at the facility. However, demonstrations under this subsection (iv) must not result in treatment or storage facilities expanding into land-based or incineration facilities if siting criteria cannot be satisfied.

(b) This section does not apply to:

(i) Owners/operators of facilities or portions of facilities who are 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 or WAC 173-303-809;

(ii) Owners/operators of facilities operating under an emergency permit pursuant to WAC 173-303-804;

(iii) Persons at facilities conducting on-site cleanup of sites under the Comprehensive Environmental Response Compensation and Liability Act, Sections 3004(u), 3004(v), and 3008(h) of the Resource Conservation and Recovery Act, chapter 70.105 RCW, or chapter 70.105D RCW, provided the cleanup activities are being conducted under a consent decree, agreed order, or enforcement order, or is being conducted by the department or United States Environmental Protection Agency;

(iv) Persons managing solid wastes who become subject to dangerous waste regulations through amendments to this chapter after the effective date of this section. This provision applies only to those activities operated in accordance with local, state, and federal requirements and which were being conducted prior to becoming subject to Dangerous waste regulations, chapter 173-303 WAC or expansions, if it can be demonstrated to the satisfaction of the department that the proposed expansion of such activities will provide a net increase in protection to human health and the environment beyond that which is currently provided at the facility; or

(v) Owners/operators of facilities which recycle hazardous waste and:

(A) Are otherwise exempt from regulation by this chapter under 120;

(B) Have notified the department pursuant to WAC 173-303-060, prior to the effective date of this section;

(C) Are currently operating as a recycling facility as of the effective date of this regulation; and

(D) Seek only to obtain a tank or container storage permit to support recycling operations under this chapter.

Further, significant expansions of such storage facilities meeting the qualifications for this exemption may be considered under subsection (2)(a)(iv) of this section.

(3) **Definitions.** Any terms used in this section that are not defined below have the meanings provided in WAC 173-303-040. For the purposes of this section, the following terms have the described meanings:

(a) "Aquifer of beneficial use" means an aquifer that contains sufficient quality and quantity of water to allow it to be withdrawn for beneficial uses which include, but are not limited to, uses for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, or recreational purposes.

(b) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(c) "Domestic water use" means any water used for human consumption, other domestic activities or livestock watering for which the department has issued a permit of water right for surface water diversions pursuant to chapter 90.03 RCW, or for a well pursuant to chapter 90.44 RCW, or for which the department has received a well water report pursuant to RCW 18.104.050, or for any other valid water right claimed in accordance with chapter 90.14 RCW. This does not apply to wells abandoned in compliance with chapter 173-160 WAC.

(d) "Existing facility" means a facility which has qualified for interim status under WAC 173-303-805 or for which the department has issued a final facility permit under WAC 173-303-806.

(e) "Expansion" means the enlargement of the land surface area of an existing facility from that described in an interim status permit application or final facility permit, the addition of a new dangerous waste management process, or an increase in 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.

(f) "Fault" means a fracture along which rocks or soils on one side have been displaced with respect to those on the other side.

(g) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene to the present.

(h) "Land-based facility" means a dangerous waste management facility which falls under the definition of land disposal as defined in Section 3004(k) of the Resource Conservation and Recovery Act. These facilities use the land as an integral part of their waste management method and include, but are not limited to, landfills, surface impoundments, waste piles, and land treatment facilities. For the purposes of this section, this would not include waste piles in which the dangerous wastes are stored inside or under a structure that provides protection from precipitation and when runoff, leachate, or other types of waste dispersal are not generated under any conditions.

(i) "Nonland based facility" means a facility which does not use the land as an integral part of its waste management method and is not subject to the requirements of WAC 173-303-806 (4)(a)(xxi). These facilities include, but are not limited to, tanks, containers, and incinerators.

(j) "Perennial surface water body" means a surface water body which is normally continuous with natural flows throughout the year or an annually recurring body of water including lakes, rivers, ponds, streams, reservoirs, inland waters, and saltwaters. This does not include roadside ditches or storm drains. However, this definition does apply to irrigation or domestic water supply channels existing, or planned

and approved by a governmental agency, at the time an owner/operator submits a notice of intent.

(k) "Preempted facility" means any facility that includes as a significant part of its activities any of the following operations: (i) Landfill; (ii) incineration; (iii) land treatment; (iv) surface impoundment to be closed as a landfill; or (v) waste pile to be closed as a landfill.

(l) "Prime farmland" means the land which has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber or oilseed crops, and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. In general, prime farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. Prime farmland is not excessively erodible or saturated with water for a long period of time, and it either does not flood frequently or is protected from flooding. Prime farmland will be determined by those general and specific criteria as defined in the National Soils Handbook, Soil Conservation Service, United States Department of Agriculture, Washington, D.C. and 7 CFR 2.62. Areas of prime farmland are identified in the most recent county soil survey maps prepared by the National Cooperative Soil Survey.

(m) "Proposed facility" means a facility which has not qualified for interim status under WAC 173-303-805 or for which the department has not issued a final facility permit under WAC 173-303-806.

(n) "Public gathering places" means a place such as a public or private health care or child care facility; an educational institution; a church; a government institution not associated with dangerous waste management; or a retail shopping center.

(o) "Residence" means any dwelling including, but not limited to, private homes, rental homes, boarding houses, apartments, motels, or hotels.

(p) "Significant expansion" means an expansion of an existing facility, operating under interim status or a final status permit, that is considered a class three modification as designated by 40 CFR Parts 270.41 and 270.42. Examples include, but are not limited to, a modification or addition of container units resulting in greater than a twenty-five percent increase in the facility's container storage capacity, storage of different wastes in containers that require additional or different management practices from those authorized under interim status or by a final status permit, and a modification or addition of tank units resulting in greater than twenty-five percent increase in the facility's capacity. For the purposes of this section, a single or cumulative increase of greater than twenty-five percent of the process design capacity as described in the facility's original Part A permit application will be considered a significant expansion.

(q) "Slope and soil instability" means areas for which there is credible evidence of, or the potential for, landslides, slumps, avalanches, earth or mud flows, or other unsuitable slope conditions.

(r) "Subsidence" means areas for which there is credible evidence of, or potential for, sinking of the land surface. Areas of subsurface mines, caves, cavernous materials, or where there has been significant removal of fluids may provide credible evidence of subsidence.

(s) "Wetland" means land 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. For purposes of this classification a wetland must have one or more of the following three attributes: (i) At least periodically, the land supports predominantly hydrophytes; (ii) the substrate is predominantly undrained hydric soil; and (iii) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year. The *Joint Federal Methodology for Identifying and Delineating Wetlands* must be used for defining the upland boundary of wetlands.

(4) **Implementation.**

(a) Submittal of information to demonstrate compliance. Documentation that a proposed facility or expansion site meets the siting criteria must be submitted to the department:

(i) In the notice of intent for those facilities for which a notice of intent is filed after the effective date of this section; or

(ii) Within ninety days of the effective date of this section for proposed facilities for which a notice of intent or an application for a Part B permit has been submitted to the department prior to the effective date of this section.

(b) Consultation by department. The department will consult with the lead local government as defined in WAC 173-303-902 (4)(h) and consider those local land use, building, fire, air quality, and transportation standards to the extent they add to and do not conflict with the requirements of this section. Such consultation and consideration will be made prior to the department's rendering of a tentative decision under subsection (4)(c) of this section.

(c) Response by department. Within sixty days of receipt of a demonstration of compliance, the department will undertake one of the following actions:

(i) Return the demonstration of compliance as incomplete with written comments identifying the need for additional information. The owner or operator may resubmit the demonstration of compliance with complete information; or

(ii) Render a written tentative decision to approve or deny the demonstration of compliance.

(d) Public notice and hearing process. The department in making a tentative decision to approve or deny a demonstration of compliance with this section will take the following actions:

(i) For land-based facilities and incinerators:

(A) The department will publish a notice of its tentative decision in a daily or weekly newspaper of general circulation in the potentially affected area, and will give notice by other reasonable methods to persons potentially affected.

(B) The department will hold a public hearing at a location convenient to the public in the potentially affected area. Notice of the date, time, purpose, and place of the hearing will be provided in the publication of notice.

(C) The department will accept comments on its tentative decision for a minimum of forty-five days.

(D) After evaluating all public comments the department will make a final decision in accordance with chapter 34.05 RCW. The department will either approve or deny the owner/operator's demonstration of compliance.

(ii) For nonland-based facilities, excluding incinerators:

(A) The department will publish a notice of its tentative decision in a daily or weekly newspaper of general circulation in the potentially affected area, and will give notice by other reasonable methods to persons potentially affected.

(B) Upon the written request of any interested person, the department may hold a public hearing to consider public comments on the owner or operator's demonstration of compliance. A person requesting the hearing must state the issues to be raised and explain why written comments would not suffice. In any case, if ten or more persons request a public hearing on the subject of the department's tentative decision, the department will hold a public hearing for the purpose of receiving comments.

(C) The department will accept comments on its tentative decision for a minimum of forty-five days.

(D) After evaluating all public comments the department will make a final decision in accordance with chapter 34.05 RCW. The department will either approve or deny the owner or operator's demonstration of compliance.

(5) **Appeal of a department decision.** Any person who is adversely affected by a decision of the department under this section may appeal the decision to the pollution control hearings board pursuant to the authority of WAC 173-303-845.

(6) **Criteria for elements of the natural environment.** The following siting criteria establish locations from which facilities are excluded and establish minimum setback distances from identified resources. Unless otherwise stated, setback distances are measured horizontally from the dangerous waste management unit boundary to the identified resource.

These criteria will be used as an initial screening tool in the selection of sites which may be considered by the department for the purpose of managing dangerous waste. A more comprehensive evaluation of locational factors will occur during the department's review of a permit application. The department may deny a permit or impose additional setback distances or other permit requirements if necessary to protect human health and the environment.

(a) Earth. The intent of this subsection is to reduce the potential for the release of dangerous waste into the environment because of structural damage to facilities subject to the hazards identified below. The owner/operator must provide supportive geologic, geotechnical, and soils information.

(i) Seismic risk. All dangerous waste management facilities must be located such that the dangerous waste management unit boundary is located at least five hundred feet from a fault which has had displacement in Holocene times.

(ii) Subsidence. No dangerous waste management facility may be located such that the dangerous waste management unit is within an area of subsidence.

(iii) Slope or soil instability. No dangerous waste management facility may be located such that the dangerous waste management unit is within an area of slope or soil instability, nor in the areas affected by unstable slope or soil conditions.

(b) Air. The intent of this subsection is to reduce the potential for further degradation of air quality in areas currently experiencing air quality impacts.

(i) Incineration facilities may not be located in a Class I area designated in accordance with Section 162 or 164 of the Federal Clean Air Act (under WAC 173-300-030(13)).

(ii) Incineration facilities may not be located in a nonattainment area designated by the department unless compensating emission offset can be achieved.

(iii) Proposed incineration facilities must comply with WAC 173-303-806 (4)(a)(xxii) during the permitting process.

(c) Water. The intent of this subsection is to reduce the potential for contaminating waters of the state in the event of a release of dangerous wastes.

(i) Surface water.

(A) Flood, seiche, and tsunami protection.

(I) No dangerous waste management facility or dangerous waste management unit may be located within the one hundred-year flood plain as indicated in the most current Federal Emergency Management Agency maps.

(II) The owner/operator of a nonland-based facility must identify whether the facility is intended to be located within the five hundred-year flood plain, as indicated in the most current Federal Emergency Management Agency maps. Nonland-based facilities will require special design features so as to prevent flooding of the dangerous waste management unit in the event of a five hundred-year flood.

(III) Land-based facilities may not be located within the five hundred-year flood plain as indicated in the most current Federal Emergency Management Agency maps.

(IV) Dangerous waste management facilities may not be located in areas subject to seiches, or coastal flooding including tsunamis or storm surges as indicated in the most current maps of the National Flood Insurance Program of the Federal Emergency Management Agency.

(B) Perennial surface water bodies.

(I) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from a perennial surface water body.

(II) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from a perennial surface water body.

(C) Surface water supply.

(I) No dangerous waste management facility may be located in a watershed identified in the report submitted to, and approved by, the department of health under the authority of WAC 246-290-135(5), Watershed control.

(II) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the nearest surface water intake for domestic water.

(III) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from the nearest surface water intake for domestic water.

(ii) Ground water. To the extent feasible, proponents of land-based facilities should seek sites with natural site characteristics which are capable of providing protection of ground water resources. Natural features such as low perme-

ability soils and substrata, relatively simple geologic formations, and high rates of evapotranspiration in relation to the seasonal occurrence of precipitation are preferable for the locations of land-based facilities. Proposed land-based facilities must comply with the contingent ground water protection program, WAC 173-303-806 (4)(a)(xxi), during the permitting process.

(A) Depth to ground water.

(I) Nonland-based facilities may not be located in areas where there is less than ten feet vertical separation between the lowest point of the dangerous waste management unit and the seasonal high water level of the uppermost aquifer of beneficial use.

(II) Land-based facilities may not be located in areas where there is less than fifty feet vertical separation between the lowest point of the dangerous waste management unit and the seasonal highwater level of the uppermost aquifer of beneficial use.

(B) Sole source aquifer. No land-based facilities may be located over an area designated as a sole source aquifer under section 1424(e) of the Federal Safe Drinking Water Act (P.L. 93-523).

(C) Ground water management areas. Owners/operators of facilities must identify whether the proposed facility location is within a ground water management area, as proposed or certified pursuant to RCW 90.44.130. In order to maintain consistency with the purpose and substantive requirements of certified ground water management area plans, the department may require additional protective measures or reject inconsistent projects.

(D) Ground water intakes.

(I) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the nearest ground water intake for domestic water.

(II) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from the nearest ground water intake for domestic water.

(E) Special protection areas. Land-based facilities must not be located within ground water special protection areas designated by ecology under the authority of chapter 90.48 RCW.

(d) Plants and animals: Intent. To reduce the potential for dangerous waste contaminating plant and animal habitat in the event of a release of dangerous wastes.

(i) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the following areas:

(A) Wetlands;

(B) Designated critical habitat, for federally listed threatened or endangered species, as defined by the Endangered Species Act of 1973 (P.L. 93-205);

(C) Habitat designated by the Washington department of wildlife as habitat essential to the maintenance or recovery of any state listed threatened or endangered wildlife species;

(D) Natural areas which are acquired or voluntarily registered or dedicated by the owner under chapter 79.70 RCW, Natural area preserves; and

(E) State or federally designated wildlife refuge, preserve, or bald eagle protection area.

(ii) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from those areas specified in item (i) above.

(e) Precipitation. The intent of this subsection is to reduce the potential for contaminating waters and soils of the state in the event of a release of dangerous wastes.

Land-based facilities must not be located in areas having a mean annual precipitation level of greater than one hundred inches. The mean annual precipitation map in the U.S. Geological Survey Water-Resources Investigations Report 84-4279 must be used to determine whether a land-based facility is proposed to be located in such an area.

(7) **Criteria for elements of the built environment.** The following siting criteria establish locations from which facilities are excluded or which require separation from identified land uses. Unless otherwise stated, setback distances are measured horizontally from the dangerous waste management unit boundary to the identified land use.

These criteria must be used as an initial screening tool in the selection of sites which may be considered by the department for the purpose of managing dangerous waste. A more comprehensive evaluation of locational factors will occur during the department's review of a permit application. The department may deny a permit or impose additional setback distances or other permit requirements if necessary to protect human health and the environment.

(a) Adjacent land use.

(i) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least two hundred feet from the nearest point of the facility property line.

(ii) Land-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the nearest point of the facility property line.

(b) Special land uses.

(i) Wild and scenic rivers. Dangerous waste management facilities must not be located within the viewshed of users on wild and scenic rivers designated by the state or federal government.

(ii) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the following:

(A) State or federally designated park, recreation area, or national monument;

(B) Wilderness area as defined by the Wilderness Act of 1964 (P.L. 88-577); and

(C) Land identified as prime farmland at the time a notice of intent is submitted to the department.

(iii) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from those land uses specified in item (ii) above.

(c) Residences and public gathering places.

(i) Nonland-based facilities with the exception of incineration facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from residences or public gathering places.

(ii) Incineration and land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from residences or public gathering places.

(d) Land use compatibility. Owners/operators of nonpreempted facilities must conform with local land use zoning designation requirements, as approved by the department under chapter 70.105 RCW.

(e) Archeological sites and historic sites. No dangerous waste management facility must be located in an archeological site or historic site designated by the state or federal government.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-282, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-282, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-282, filed 12/8/93, effective 1/8/94. Statutory Authority: RCW 43.21A.080 and 70.105.210, et seq. 90-20-016, § 173-303-282, filed 9/21/90, effective 10/22/90.]

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 must 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 must 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: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-283, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-283, filed 9/6/88.]

WAC 173-303-290 Required notices. (1) The facility owner or operator who is receiving dangerous waste from sources outside the United States must notify the appropriate regional office of the department annually, and in writing at least four weeks in advance of the date the first shipment of waste is expected to arrive at the facility. The notification must be in writing, signed by the importer and operator of the receiving facility, and include the following information:

(a) Name, street address, mailing address, and telephone number of the exporter.

(b) Name, street address, mailing address, telephone number, and EPA/state ID number of the importer and receiving facility.

(c) A description of the dangerous waste and the EPA/state waste numbers, U.S. DOT proper shipping name, hazard class and ID number (UN\NA) for each hazardous waste as identified in 49 CFR Parts 171 through 177.

(d) The estimated frequency or rate at which such waste is to be imported and the period of time over which such waste is to be imported.

(e) The estimated total quantity of the dangerous waste in units as specified in the instructions to the Uniform Hazardous Waste Manifest Form (8700-22).

(f) A description of the manner by which the dangerous waste will be treated, stored, disposed of, or recycled by the receiving facility.

Upon request by the department, the importer and/or receiving facility must furnish to the department any additional information regarding the importation of dangerous waste.

(2) Before transferring ownership or operation of a facility during its active life or post-closure care period, the owner or operator must notify the new owner or operator in writing of the requirements of this chapter 173-303 WAC.

(3) The owner or operator of a facility that receives dangerous waste from an off-site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator must keep a copy of this written notice as part of the operating record required under WAC 173-303-380(1).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-290, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-290, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-290, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-290, filed 2/10/82.]

WAC 173-303-300 General waste analysis. (1) Purpose. This section requires the facility owner or operator to confirm his knowledge about a dangerous waste before he stores, treats, or disposes of it. The purpose for the analysis is to insure that a dangerous waste is managed properly.

(2) The owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), before he stores, treats, or disposes of it. This analysis must contain the information necessary to manage the waste in accordance with the requirements of this chapter 173-303 WAC. The analysis may include or consist of existing published or documented data on the dangerous waste, or on waste generated from similar processes, or data obtained by testing, if necessary.

(3) The owner or operator of an off-site facility must confirm, by analysis if necessary, that each dangerous waste

received at the facility matches the identity of the waste specified on the accompanying manifest or shipping paper.

(4) Analysis must be repeated as necessary to ensure that it is accurate and current. At a minimum, analysis must be repeated:

(a) When the owner or operator has been notified, or has reason to believe, that the process or operation generating the dangerous waste, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), has significantly changed; and

(b) When a dangerous waste received at an off-site facility does not match the identity of the waste specified on the manifest or the shipping paper.

(5) Waste analysis plan. The owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section. He must keep this plan at the facility, and the plan must contain at least:

(a) The parameters for which each dangerous waste, or nondangerous waste if applicable under WAC 173-303-610 (4)(d), will be analyzed, and the rationale for selecting these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsections (1) through (4) of this section);

(b) The methods of obtaining or testing for these parameters;

(c) The methods for obtaining representative samples of wastes for analysis (representative sampling methods are discussed in WAC 173-303-110(2));

(d) The frequency with which analysis of a waste will be reviewed or repeated to ensure that the analysis is accurate and current;

(e) The waste analyses which generators have agreed to supply;

(f) Where applicable, the methods for meeting the additional waste analysis requirements for specific waste management methods as specified in WAC 173-303-400(3) which incorporates by reference the regulations in 40 CFR Part 265 Subparts F through R 265.1034, 265.1063(d), 265.1084, 268.4(a) and 268.7 for interim status facilities and in WAC 173-303-140 (4)(b), 173-303-395(1), 173-303-630 through 173-303-670, and 40 CFR 264.1034, 264.1063(d), 264.1083, 268.4(a) and 268.7 for final status facilities;

(g) For off-site facilities, the waste analysis that dangerous waste generators have agreed to supply;

(h) For surface impoundments exempted from land disposal restrictions under 40 CFR 268.4(a), incorporated by reference in WAC 173-303-140(2), the procedures and schedules for:

(i) The sampling of impoundment contents;

(ii) The analysis of test data; and

(iii) The annual removal of residues that are not delisted under 40 CFR 260.22 or which exhibit a characteristic of hazardous waste and either:

(A) Do not meet applicable treatment standards of 40 CFR Part 268, Subpart D; or

(B) Where no treatment standards have been established;

(I) Such residues are prohibited from land disposal under 40 CFR 268.32 or RCRA section 3004(d); or

(II) Such residues are prohibited from land disposal under 40 CFR 268.33(f).

(i) For owners and operators seeking an exemption to the air emission standards of subpart CC in accordance with Sec. 264.1082, incorporated by reference at WAC 173-303-692, or with 265.1083, incorporated by reference at WAC 173-303-400 (3)(a):

(A) If direct measurement is used for the waste determination, the procedures and schedules for waste sampling and analysis, and the results of the analysis of test data to verify the exemption.

(B) If knowledge of the waste is used for the waste determination, any information prepared by the facility owner or operator or by the generator of the hazardous waste, if the waste is received from off-site, that is used as the basis for knowledge of the waste.

(6) For off-site facilities, the waste analysis plan required in subsection (5) of this section must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

(a) The procedures which will be used to determine the identity of each movement of waste managed at the facility;

(b) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling; and

(c) The procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.

Comment: WAC 173-303-806 requires that the waste analysis plan be submitted with Part B of the permit application.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-300, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-300, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-300, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-300, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-300, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-300, filed 2/10/82.]

WAC 173-303-310 Security. (1) The owner or operator must comply with the requirements of this section, unless he can demonstrate to the department that:

(a) Physical contact with wastes or equipment within the active portion of the facility will not injure persons or livestock; and

(b) Disturbance of the wastes or equipment within the active portion of the facility by persons or livestock will not result in violations of this chapter 173-303 WAC.

(2) A facility must have:

(a) Signs posted at each entrance to the active portion, and at other locations, in sufficient numbers to be seen from any approach to the active portion. Signs must bear the legend, "Danger-unauthorized personnel keep out," or an equivalent legend, written in English, and must be legible from a distance of twenty-five feet or more; and either

(b) A 24-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility; or

(c) An artificial or natural barrier, or a combination of both, which completely surrounds the active portion of the facility, with a means to control access through gates or other entrances to the active portion of the facility at all times.

(3) In lieu of WAC 173-303-310(2), above, the owner or operator of a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit (as defined in WAC 173-303-040) must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock into or onto the totally enclosed treatment facility or the elementary neutralization or wastewater treatment unit.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-310, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-310, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-310, filed 2/10/82. Formerly WAC 173-302-290.]

WAC 173-303-320 General inspection. (1) The owner or operator must inspect his facility to prevent malfunctions and deterioration, operator errors, and discharges which may cause or lead to the release of dangerous waste constituents 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.

(2) The owner or operator must develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that help prevent, detect, or respond to hazards to the public health or the environment. In addition:

(a) He must keep the schedule at the facility;

(b) The schedule must identify the types of problems which are to be looked for during inspections;

(c) The schedule must indicate the frequency of inspection for specific items. The frequency should be based on the rate of possible deterioration of equipment, and the probability of an environmental or human health incident. Areas subject to spills must be inspected daily when in use. At a minimum the inspection schedule must also include the applicable items and frequencies required for the specific waste management methods described in 40 CFR Part 265 Subparts F through R, 265.1033, 265.1052, 265.1053, 265.1058 and 265.1084 through 265.1090, for interim status facilities and in WAC 173-303-630 through 173-303-680, and 40 CFR 264.1033, 264.1052, 264.1053, 264.1058 and 264.1083 through 264.1089 for final status facilities; and

(d) The owner or operator must keep an inspection log or summary, including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made, an account of spills or discharges in accordance with WAC 173-303-145, and the date and nature of any repairs or remedial actions taken. The log or summary must be kept at the facility for at least five years from the date of inspection.

(3) The owner or operator must remedy any problems revealed by the inspection, on a schedule which prevents hazards to the public health and environment. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-320, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-320, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-320, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-320, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-320, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-320, filed 2/10/82.]

WAC 173-303-330 Personnel training. (1) Training program. The facility owner or operator must provide a program of classroom instruction or on-the-job training for facility personnel. This program must teach personnel to perform their duties in a way that ensures the facility's compliance with this chapter 173-303 WAC, must teach facility personnel dangerous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed, must ensure that facility personnel are able to respond effectively to emergencies, and must include those elements set forth in the training plan required in subsection (2) of this section. In addition:

(a) The training program must be directed by a person knowledgeable in dangerous waste management procedures, and must include training relevant to the positions in which the facility personnel are employed;

(b) Facility personnel must participate in an annual review of the training provided in the training program;

(c) This program must be successfully completed by the facility personnel:

(i) Within six months after these regulations become effective; or

(ii) Within six months after their employment at or assignment to the facility, or to a new position at the facility, whichever is later.

Employees hired after the effective date of these regulations must be supervised until they complete the training program; and

(d) At a minimum, the training program must familiarize facility personnel with emergency equipment and systems, and emergency procedures. The program must include other parameters as set forth by the department, but at a minimum must include, where applicable:

(i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

(ii) Key parameters for automatic waste feed cut-off systems;

(iii) Communications or alarm systems;

(iv) Response to fires or explosions;

(v) Response to ground-water contamination incidents; and

(vi) Shutdown of operations.

(2) Written training plan. The owner or operator must develop a written training plan which must be kept at the

facility and which must include the following documents and records:

(a) For each position related to dangerous waste management at the facility, the job title, the job description, and the name of the employee filling each job. The job description must include the requisite skills, education, other qualifications, and duties for each position;

(b) A written description of the type and amount of both introductory and continuing training required for each position; and

(c) Records documenting that facility personnel have received and completed the training required by this section. The department may require, on a case-by-case basis, that training records include employee initials or signature to verify that training was received.

(3) Training records. Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-330, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-330, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-330, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-330, filed 2/10/82. Formerly WAC 173-302-320.]

WAC 173-303-335 Construction quality assurance program. (1) CQA program.

(a) A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with WAC 173-303-650 (2)(j) and (k), 173-303-660 (2)(j) and (k), and 173-303-665 (2)(h) and (j). The program must ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program must be developed and implemented under the direction of a CQA officer who is a registered professional engineer.

(b) The CQA program must address the following physical components, where applicable:

(i) Foundations;

(ii) Dikes;

(iii) Low-permeability soil liners;

(iv) Geomembranes (flexible membrane liners);

(v) Leachate collection and removal systems and leak detection systems; and

(vi) Final cover systems.

(2) Written CQA plan. The owner or operator of units subject to the CQA program under (a) of this subsection must develop and implement a written CQA plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan must include:

(a) Identification of applicable units, and a description of how they will be constructed.

(b) Identification of key personnel in the development and implementation of the CQA plan, and CQA officer qualifications.

(c) A description of inspection and sampling activities for all unit components identified in subsection (1)(b) of this section, including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description must cover: Sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under WAC 173-303-380.

(3) Contents of program.

(a) The CQA program must include observations, inspections, tests, and measurements sufficient to ensure:

(i) Structural stability and integrity of all components of the unit identified in subsection (1)(b) of this section;

(ii) Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e.g., pipes) according to design specifications;

(iii) Conformity of all materials used with design and other material specifications under WAC 173-303-650, 173-303-660, and 173-303-665.

(b) The CQA program will include test fills for compacted soil liners, using the same compaction methods as in the full scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of WAC 173-303-650 (2)(j)(i)(B), 173-303-660 (2)(j)(i)(B), and 173-303-665 (2)(h)(i)(B) in the field. Compliance with the hydraulic conductivity requirements must be verified by using in-situ testing on the constructed test fill. The department may accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of WAC 173-303-650 (2)(j)(i)(B), 173-303-660 (2)(j)(i)(B), and 173-303-665 (2)(h)(i)(B) in the field.

(4) Certification. Waste will not be received in a unit subject to this section until the owner or operator has submitted to the department by certified mail or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out and that the unit meets the requirements of WAC 173-303-650 (2)(j) or (k), 173-303-660 (2)(j) or (k), or 173-303-665 (2)(h) or (j); and the procedure in WAC 173-303-810 (14)(a) has been completed. Documentation supporting the CQA officer's certification must be furnished to the department upon request.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-335, filed 10/19/95, effective 11/19/95.]

WAC 173-303-340 Preparedness and prevention. Facilities must be designed, constructed, maintained and operated to minimize the possibility of fire, explosion, or any unplanned sudden or nonsudden release of dangerous waste or dangerous waste constituents to air, soil, or surface or ground water which could threaten the public health or the environment. This section describes preparations and preventive measures which help avoid or mitigate such situations.

(1) Required equipment. All facilities must be equipped with the following, unless it can be demonstrated to the department that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

(a) An internal communications or alarm system capable of providing immediate emergency instruction to facility personnel;

(b) A device, such as a telephone or a hand-held, two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

(d) Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

(2) Access to communications or alarms. Personnel must have immediate access to the signalling devices described in the situations below:

(a) Whenever dangerous waste is being poured, mixed, spread, or otherwise handled, all personnel involved must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required in subsection (1) of this section;

(b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone or a hand-held, two-way radio, capable of summoning external emergency assistance, unless such a device is not required in subsection (1) of this section.

(3) Aisle space. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the department that aisle space is not needed for any of these purposes.

(4) Arrangements with local authorities. The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations, unless the hazards posed by wastes handled at the facility would not require these arrangements:

(a) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of dangerous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes;

(b) Arrangements to familiarize local hospitals with the properties of dangerous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility;

(c) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

(d) Where more than one party might respond to an emergency, agreements designating primary emergency authority and agreements with any others to provide support to the primary emergency authority.

(5) Where state or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-340, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-340, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-340, filed 2/10/82.]

WAC 173-303-350 Contingency plan and emergency procedures. (1) Purpose. The purpose of this section and WAC 173-303-360 is to lessen the potential impact on the public health and the environment in the event of an emergency circumstance, including a fire, explosion, or unplanned sudden or nonsudden release of dangerous waste or dangerous waste constituents to air, soil, surface water, or ground water by a facility. A contingency plan must be developed to lessen the potential impacts of such emergency circumstances, and the plan must be implemented immediately in such emergency circumstances.

(2) Contingency plan. Each owner or operator must have a contingency plan at his facility for use in emergencies or sudden or nonsudden releases which threaten human health and the environment. If the owner or operator has already prepared a spill prevention control and countermeasures (SPCC) plan in accordance with Part 112 of Title 40 CFR or Part 1510 of chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate dangerous waste management provisions that are sufficient to comply with the requirements of this section and WAC 173-303-360.

(3) The contingency plan must contain the following:

(a) A description of the actions which facility personnel must take to comply with this section and WAC 173-303-360;

(b) A description of the actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported, pursuant to the requirements of WAC 173-303-370(5), Manifest system, reasons for not accepting dangerous waste shipments;

(c) A description of the arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services as required in WAC 173-303-340(4);

(d) A current list of names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator required under WAC 173-303-360(1). Where more than one person is listed, one must be named as primary emergency coordinator, and others must be

listed in the order in which they will assume responsibility as alternates. For new facilities only, this list may be provided to the department at the time of facility certification (as required by WAC 173-303-810 (14)(a)(i)), rather than as part of the permit application;

(e) A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities; and

(f) An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe the signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

(4) Copies of contingency plan. A copy of the contingency plan and all revisions to the plan must be:

(a) Maintained at the facility; and

(b) Submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.

(5) Amendments. The owner or operator must review and immediately amend the contingency plan, if necessary, whenever:

(a) Applicable regulations or the facility permit are revised;

(b) The plan fails in an emergency;

(c) The facility changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of dangerous waste or dangerous waste constituents, or in a way that changes the response necessary in an emergency;

(d) The list of emergency coordinators changes; or

(e) The list of emergency equipment changes.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-350, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-350, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-350, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-350, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-350, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-355 Superfund Amendments and Reauthorization Act Title III coordination. (1) Owners or operators must coordinate preparedness and prevention planning and contingency planning efforts, conducted under WAC 173-303-340 and 173-303-350, with local emergency planning committees established pursuant to Title III of the 1986 Superfund Amendments and Reauthorization Act.

(2) Appropriate and generally accepted computer models should be utilized to determine the impacts of a potential catastrophic air release due to fire, explosion, or other accidental releases of hazardous constituents. Evacuation plans prepared pursuant to WAC 173-303-350 (3)(d) must include those effected persons and areas identified through these modelling efforts.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-355, filed 10/19/95, effective 11/19/95. Statutory Authority: RCW 43.21A.080 and 70.105.210, et seq. 90-20-016, § 173-303-355, filed 9/21/90, effective 10/22/90.]

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 (that is, 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. 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 must 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 must 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, 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, wherever 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;

(iii) Date, time, and type of incident (e.g., fire, explosion);

(iv) Name and quantity of material(s) involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable;

(vii) Estimated quantity and disposition of recovered material that resulted from the incident;

(viii) Cause of incident; and

(ix) Description of corrective action taken to prevent reoccurrence of the incident.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-360, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-360, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-360, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-360, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-360, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-360, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-360, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-370 Manifest system. (1) Applicability. The requirements of this section apply to owners and operators who receive dangerous waste from off-site sources.

(2) If a facility receives dangerous waste accompanied by a manifest, the owner or operator, or his agent, must:

(a) Sign and date each copy of the manifest to certify that the dangerous waste covered by the manifest was received;

(b) Note any significant discrepancies in the manifest, as described in subsection (4) of this section, on each copy of the manifest;

(c) Immediately give the transporter at least one copy of the signed manifest;

(d) Within thirty days after the delivery, send a copy of the manifest to the generator; and

(e) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

(3) If a facility receives, from a rail or water (bulk shipment) transporter, dangerous waste which is accompanied by a manifest or shipping paper containing all the information required on the manifest (excluding the EPA/state identification numbers, generator's certification, and signatures), the owner or operator, or his agent, must:

(a) Sign and date each copy of the manifest or shipping paper to certify that the dangerous waste covered by the manifest or shipping paper was received;

(b) Note any significant discrepancies in the manifest or shipping paper, as described in subsection (4) of this section, on each copy of the manifest or shipping paper;

(c) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper;

(d) Within thirty days after the delivery, send a copy of the signed and dated manifest or shipping paper to the generator. However, if the manifest is not received within thirty days after the delivery, the owner or operator, or his agent, must send a copy of the signed and dated shipping paper to the generator; and

(e) Retain at the facility a copy of each shipping paper and manifest for at least three years from the date of delivery.

(4) Manifest discrepancies.

(a) Manifest discrepancies are significant discrepancies between the quantity or type of dangerous waste designated on the manifest or shipping paper and the quantity or type of dangerous waste a facility actually receives. Significant discrepancies in quantity are variations greater than ten percent in weight for bulk quantities (e.g., tanker trucks, railroad tank cars, etc.), or any variations in piece count for nonbulk quantities (i.e., any missing container or package would be a significant discrepancy). Significant discrepancies in type are obvious physical or chemical differences which can be discovered by inspection or waste analysis (e.g., waste solvent substituted for waste acid).

(b) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator and transporter. If the discrepancy is not resolved within fifteen days after receiving the waste, the owner or operator must immediately submit to the department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

(5) Reasons for not accepting dangerous waste shipments. The owner or operator may decide that a dangerous shipment should not be accepted by his facility.

(a) The following are acceptable reasons for denying receipt of a dangerous waste shipment:

(i) The facility is not capable of properly managing the type(s) of dangerous waste in the shipment;

(ii) There is a significant discrepancy (as described in subsection (4) of this section) between the shipment and the wastes listed on the manifest or shipping paper; or

(iii) The shipment has arrived in a condition which the owner or operator believes would present an unreasonable hazard to facility operations, or to facility personnel handling the dangerous waste(s) (including, but not limited to, leaking or damaged containers, and improperly labeled containers).

(b) The owner or operator may send the shipment on to the alternate facility designated on the manifest or shipping paper, or contact the generator to identify another facility capable of handling the waste and provide for its delivery to that other facility, unless, the containers are damaged to such an extent, or the dangerous waste is in such a condition as to present a hazard to the public health or the environment in the process of further transportation.

(c) If the dangerous waste shipment cannot leave the facility for the reasons described in (b) of this subsection, then the owner or operator must take those actions described in the contingency plan, WAC 173-303-350 (3)(b).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-370, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-370, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-370, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-370, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-380 Facility recordkeeping. (1) Operating record. The owner or operator of a facility must keep a written operating record at their facility. The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(a) A description of and the quantity of each dangerous waste received or managed on-site, and the method(s) and date(s) of its treatment, storage, or disposal at the facility as required by subsection (2) of this section, recordkeeping instructions;

(b) The location of each dangerous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each dangerous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest;

(c) Records and results of waste analyses, waste determinations (as required by Subpart CC), and trial tests required by WAC 173-303-300, General waste analysis, and by 40 CFR sections 264.1034, 264.1063, 264.1083, 265.1034, 265.1063, 265.1084, 268.4(a), and 268.7;

(d) Summary reports and details of all incidents that require implementing the contingency plan, as specified in WAC 173-303-360 (2)(k);

(e) Records and results of inspections as required by WAC 173-303-320 (2)(d), General inspection (except such information need be kept only for five years);

(f) Monitoring, testing, or analytical data, and corrective action where required by 40 CFR Part 265 Subparts F through R and sections 265.1034 (c) through (f), 265.1035, 265.1063 (d) through (i), 265.1064, and 265.1083 through 265.1090 for interim status facilities, and by WAC 173-303-630 through 173-303-695 and 40 CFR sections 264.1034 (c) through (f), 264.1035, 264.1063 (d) through (i), 264.1064, and 264.1082 through 264.1090 for final status facilities;

(g) All closure and post-closure cost estimates required for the facility;

(h) For off-site facilities, copies of notices to generators informing them that the facility has all appropriate permits, as required by WAC 173-303-290, Required notices;

(i) Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted pursuant to 40 CFR 268.5, a petition pursuant to 40 CFR 268.6, or a certification under 268.8, and the applicable notice required by a generator under 40 CFR 268.7(a);

(j) For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required by the generator or the owner or operator under 40 CFR 268.7 or 268.8;

(k) For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required by the generator or the owner or operator under 40 CFR 268.7 or 268.8;

(l) For an off-site land disposal facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator of a treatment facility under 40 CFR 268.7 and 268.8, whichever is applicable;

(m) For an on-site land disposal facility, the information contained in the notice required by the generator or owner or operator of a treatment facility under 40 CFR 268.7, except for the manifest number, and the certification and demonstration if applicable, required under 40 CFR 268.8, whichever is applicable;

(n) For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator under 40 CFR 268.7 or 268.8; and

(o) For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required by the generator or the owner or operator under 40 CFR 268.7 or 268.8.

(2) Recordkeeping instructions. This paragraph provides instructions for recording the portions of the operating record which are related to describing the types, quantities, and management of dangerous wastes at the facility. This information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility, as follows:

(a) Each dangerous waste received, treated, stored, or disposed of at the facility must be described by its common name and by its dangerous waste number(s) from WAC 173-303-080 through 173-303-104. Each listed, characteristic, and criteria waste has its own four-digit dangerous waste number. Where a dangerous waste contains more than one

process waste or waste constituent the waste description must include all applicable dangerous waste numbers. If the dangerous waste number is not listed, the waste description must include the process which generated the waste;

(b) The waste description must include the waste's physical form (i.e., liquid, solid, sludge, or contained gas);

(c) The estimated or manifest-reported weight, or volume and density, where applicable, of the dangerous waste must be recorded, using one of the units of measure specified in Table 1, below; and

TABLE 1

Unit of Measure	Code[1]
Gallons	G
Gallons per Hour	E
Gallons per Day	U
Liters	L
Liters per Hour	H
Liters per Day	V
Short tons (2000 lbs)	T
Short Tons per Hour	D
Metric Tons per Hour	W
Short Tons per Day	N
Metric Tons per Day	S
Pounds	P
Pounds per Hour	J
Kilograms	K
Kilograms per Hour	R
Cubic yards	Y
Cubic meters	C
Acres	B
Acres-feet	A
Hectares	Q
Hectare-meter	F
Btu's per Hour	I

Footnote: [1]Single-digit symbols are used here for data processing purposes.

(d) The method(s) (by handling code(s)) of management for each dangerous waste received or managed, and the date(s) of treatment, recycling, storage, or disposal must be recorded, using the handling code(s) specified in Table 2, below.

TABLE 2 - Handling Codes for Treatment, Storage, and Disposal Methods

Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store, or dispose of each quantity of dangerous waste received.

1. Storage
   - S01 Container (barrel, drum, etc.)
   - S02 Tank
   - S03 Waste pile
   - S04 Surface impoundment
   - S05 Drip Pad
   - S06 Containment Building (Storage)
   - S99 Other storage (specify)

2. Treatment
   - (a) Thermal Treatment
   - T06 Liquid injection incinerator
   - T07 Rotary kiln incinerator
   - T08 Fluidized bed incinerator
   - T09 Multiple hearth incinerator
   - T10 Infrared furnace incinerator
   - T11 Molten salt destructor
   - T12 Pyrolysis
   - T13 Wet air oxidation
   - T14 Calcination
   - T15 Microwave discharge
   - T18 Other (specify)
   - (b) Chemical treatment
   - T19 Absorption mound
   - T20 Absorption field
   - T21 Chemical fixation
   - T22 Chemical oxidation
   - T23 Chemical precipitation
   - T24 Chemical reduction
   - T25 Chlorination
   - T26 Chlorinolysis
   - T27 Cyanide destruction
   - T28 Degradation
   - T29 Detoxification
   - T30 Ion exchange
   - T31 Neutralization
   - T32 Ozonation
   - T33 Photolysis
   - T34 Other (specify)
   - (c) Physical treatment
   - (i) Separation of components
   - T35 Centrifugation
   - T36 Clarification
   - T37 Coagulation
   - T38 Decanting
   - T39 Encapsulation
   - T40 Filtration
   - T41 Flocculation
   - T42 Flotation
   - T43 Foaming
   - T44 Sedimentation
   - T45 Thickening
   - T46 Ultrafiltration
   - T47 Other (specify)
   - (ii) Removal of specific components
   - T48 Absorption-molecular sieve
   - T49 Activated carbon
   - T50 Blending
   - T51 Catalysis
   - T52 Crystallization
   - T53 Dialysis
   - T54 Distillation
   - T55 Electrodialysis
   - T56 Electrolysis
   - T57 Evaporation
   - T58 High gradient magnetic separation
   - T59 Leaching
   - T60 Liquid ion exchange
   - T61 Liquid-liquid extraction
   - T62 Reverse osmosis
   - T63 Solvent recovery
   - T64 Stripping
   - T65 Sand filter
   - T66 Other (specify)
   - (d) Biological treatment
   - T67 Activated sludge
   - T68 Aerobic lagoon
   - T69 Aerobic tank

T70 Anaerobic tank
T71 Composting
T72 Septic tank
T73 Spray irrigation
T74 Thickening filter
T75 Trickling filter
T76 Waste stabilization pond
T77 Other (specify)
T78-79 (Reserved)
(e) Boilers and industrial furnaces
T80 Boiler
T81 Cement kiln
T82 Lime kiln
T83 Aggregate kiln
T84 Phosphate kiln
T85 Coke oven
T86 Blast furnace
T87 Smelting, melting, or refining furnace
T88 Titanium dioxide chloride process oxidation reactor
T89 Methane reforming furnace
T90 Pulping liquor recovery furnace
T91 Combustion device used in the recovery of sulfur values from spent sulfuric acid
T92 Halogen acid furnaces
T93 Other industrial furnaces listed in WAC 173-303-040 (specify)
(f) Other treatment
T94 Containment building (treatment)

3. Disposal
D79 Underground injection
D80 Landfill
D81 Land treatment
D82 Ocean disposal
D83 Surface impoundment (to be closed as a landfill)
D99 Other disposal (specify)

4. Miscellaneous (Subpart X)
X01 Open burning/open detonation
X02 Mechanical processing
X03 Thermal unit
X04 Geologic repository
X99 Other Subpart X (specify)

(3) Availability, retention and disposition of records.

(a) All facility records, including plans, required by this chapter must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of the department who is designated by the director.

(b) The retention period for all facility records required under this chapter is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the director.

(c) A copy of records of waste disposal locations and quantities under this section must be submitted to the United States EPA regional administrator, the department, and the local land use and planning authority upon closure of the facility.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-380, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-380, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-380, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-380, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-380, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-380, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-380, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-390 Facility reporting. The owner or operator of a facility is responsible for preparing and submitting the reports described in this section.

(1) Unmanifested waste reports. If a facility accepts any dangerous waste from an off-site source without an accompanying manifest or shipping paper, and if the waste is not excluded from the manifest requirements of this chapter 173-303 WAC, then the owner or operator must prepare and submit a single copy of a report to the department within fifteen days after receiving the waste. The report form and instructions in the Unmanifested Dangerous Waste Report - Form 6 (which may be obtained from the department) must be used for this report. The report must include at least the following information:

(a) The EPA/state identification number, name, and address of the facility;

(b) The date the facility received the waste;

(c) The EPA/state identification number, name, and address of the generator and the transporter, if available;

(d) A description and the quantity of each unmanifested dangerous waste the facility received;

(e) The method of management for each dangerous waste;

(f) The certification signed by the owner or operator of the facility or his authorized representative; and

(g) A brief explanation of why the waste was unmanifested, if known.

(2) Annual reports. The owner or operator of a facility that holds an active EPA/state identification number must prepare and submit a single copy of an annual report to the department by March 1 of each year. The report form and instructions in the Dangerous Waste Annual Report (which may be obtained from the department) must be used for this report. In addition, any facility which ships dangerous waste off-site must comply with the annual reporting requirements of WAC 173-303-220. The annual report must cover facility activities during the previous calendar year and must include, but is not limited to the following information:

(a) The EPA/state identification number, name, and address of the facility;

(b) The calendar year covered by the report;

(c) For off-site facilities, the EPA/state identification number of each dangerous waste generator from which the facility received a dangerous waste during the year. For imported shipments, the report must give the name and address of the foreign generator;

(d) A description and the quantity of each dangerous waste the facility received during the year. For off-site facili-

ties, this information must be listed by EPA/state identification number of each generator;

(e) The method of treatment, storage, or disposal for each dangerous waste;

(f) The most recent closure cost estimate under WAC 173-303-620(3) (or 40 CFR 265.142 for interim status facilities), and for disposal facilities, the most recent post-closure cost estimate under WAC 173-303-620(5) (or 40 CFR 265.144 for interim status facilities); and

(g) The certification signed in accordance with the requirements of WAC 173-303-810(12).

(3) Additional reports. The owner or operator must report to the department:

(a) Releases of dangerous wastes, fires, and explosions as specified in WAC 173-303-360 (2)(k);

(b) Interim status ground water monitoring data, as specified in 40 CFR 265.94 (a)(2) and (b)(2);

(c) Facility closures specified in WAC 173-303-610(6); and

(d) As otherwise required by WAC 173-303-645 through 173-303-665, WAC 173-303-690 through 173-303-692, and WAC 173-303-400.

The owner or operator must also submit any other reports (including engineering reports, plans, and specifications) required by the department.

(4) Recordkeeping. The owner/operator of a facility must keep a copy of all unmanifested waste reports, annual reports, and any other reports submitted to the department according to the requirements of this section for a period of three years from the date the report was submitted. Note that some records must be kept until closure of the facility as otherwise required under WAC 173-303-380.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-390, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-390, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-390, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-390, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-390, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-390, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-390, filed 2/10/82.]

WAC 173-303-395 Other general requirements. (1) Precautions for ignitable, reactive, or incompatible wastes.

(a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including, but not limited to, open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to specially designated locations. "No smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(b) Where specifically required by other sections of this chapter 173-303 WAC, the treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

(i) Generate extreme heat or pressure, fire or explosion, or violent reaction;

(ii) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;

(iii) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(iv) Damage the structural integrity of the facility or device containing the waste; or

(v) Through other like means, threaten human health or the environment.

(c) When required to comply with (a) and (b) of this subsection, the owner or operator must document that compliance in the operating record required under WAC 173-303-380(1). This documentation may be based on references to published scientific or engineering literature, data from trial tests, waste analyses, or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

(d) At least yearly, the owner or operator must inspect those areas of his facility where ignitable or reactive wastes are stored. This inspection must be performed in the presence of a professional person who is familiar with the Uniform Fire Code, or in the presence of the local, state, or federal fire marshal. The owner or operator must enter the following information in his inspection log or operating record as a result of this inspection:

(i) The date and time of the inspection;

(ii) The name of the professional inspector or fire marshal;

(iii) A notation of the observations made; and

(iv) Any remedial actions which were taken as a result of the inspection.

(2) Compliance with other environmental protection laws and regulations. In receiving, storing, handling, treating, processing, or disposing of dangerous wastes, the owner/operator must design, maintain and operate his dangerous waste facility in compliance with all applicable federal, state and local laws and regulations (e.g., control of stormwater or sanitary water discharge, control of volatile air emissions, etc.).

(3) Reserve.

(4) Loading and unloading areas. TSD facilities which receive or ship manifested shipments of liquid dangerous waste for treatment, storage or disposal must provide for and use an area (or areas) for loading and unloading waste shipments. The loading and unloading area(s) must be designed, constructed, operated and maintained to:

(a) Contain spills and leaks that might occur during loading or unloading;

(b) Prevent release of dangerous waste or dangerous waste constituents to ground or surface waters;

(c) Contain wash waters (if any) resulting from the cleaning of contaminated transport vehicles and load/unload equipment; and

(d) Allow for removal, as soon as possible, of collected wastes resulting from spills, leaks and equipment cleaning (if

any) in a manner which assures compliance with (b) of this subsection.

(5) Storage time limit for impoundments and piles.

(a) Except as provided in (b) or (c) of this subsection, dangerous waste may not be stored in a surface impoundment or waste pile for more than five years after the waste was first placed in the impoundment or pile. For the purposes of this requirement, the five-year limit, for waste regulated under this chapter and being stored in impoundments or piles on the effective date of this requirement, will begin on August 1, 1984. The age of stored wastes must be determined on a monthly basis.

The owner/operator of a surface impoundment or waste pile used for storing dangerous waste must develop a written plan, to be kept at the facility, for complying with the five-year storage limit. The plan must describe the operating conditions, waste identification procedures (for keeping track of the age of the wastes), and a waste removal schedule, and at a minimum the plan must include the following elements:

(i) Methods for identifying the age of dangerous wastes placed in the impoundment or pile;

(ii) Where practical, procedures for segregating wastes of different ages. If the wastes cannot be practically segregated, then the age of all wastes placed in the impoundment or pile must be deemed the same age as the oldest waste in the impoundment or pile;

(iii) A schedule for removing dangerous waste from the impoundment or pile, or for disposing of them in a timely manner to assure compliance with the five-year limit;

(iv) A description of the actions to be taken according to the schedule required by (a)(iii) of this subsection;

(v) Procedures for noting in the operating record required by WAC 173-303-380(1) that the requirements of this subsection have been satisfied; and

(vi) Such other requirements as the department specifies.

(b) If the owner/operator of a surface impoundment or waste pile can develop a written plan and schedule for developing and implementing a recycling or treatment process for the wastes stored in his impoundment or pile, then the department may grant an extension to the storage time limit required in (a) of this subsection. Such extension will be granted only once, will only apply to those dangerous wastes covered by the recycling or treatment plan and which are less than five years old on the date that the plan is approved by the department, and will not exceed five years: Provided, That on a case-by-case basis the department may grant an extension of longer than five years, but in no case will any extension be granted for longer than ten years, if the owner/operator of the impoundment or pile can demonstrate to the department's satisfaction that an extension of more than five years will not pose a threat to public health or the environment, and is necessary because: Other treatment or recycling options of shorter durations are not available; the treatment or recycling plan developed by the owner/operator cannot be implemented within five years due to technological circumstances; or, such other reasons as are determined acceptable by the department. Until the department grants the extension by approving the recycling or treatment plan, the owner/operator must continue to comply with the requirements of (a) of this subsection. The recycling or treatment plan and schedule, at a minimum, must:

(i) Specify the wastes which will be recycled or treated in accordance with the plan;

(ii) Describe in detail the recycling or treatment which the owner/operator intends to perform. If the recycling or treatment will involve physical changes to the owner's/operator's facility, the plan must include descriptions of all necessary equipment, processes to be used, site plans, and maps to show any new structures, pipes, channels, waste handling areas, roads, etc.;

(iii) Discuss any permit actions (including issuance or modification) necessary under this chapter, and any other permits which will be required under other federal, state or local laws;

(iv) Establish a schedule for complying with the plan. The schedule must, at a minimum, cover:

(A) The rate at which wastes will be recycled or treated in order to comply with the extension granted by the department;

(B) Construction and equipment installation times as appropriate;

(C) Timing for complying with all required permit actions; and

(D) Such other elements as the department might require;

(v) Describe how the owner/operator will continue to comply with the requirements of (a) of this subsection for all wastes not specified in (b)(i) of this subsection;

(vi) Identify any future occurrences or situations which the owner/operator could reasonably expect to occur and which might cause him to fail to comply with his recycling or treatment plan. The owner/operator must also describe what actions he would take in the event that such occurrences or situations happen;

(vii) Be approved by the department. The plan may not be implemented until it is approved by the department including, if necessary, issuance or modification of a facility permit as required by this chapter. Any extension granted by the department will begin on the date that the plan is approved, or the date five years after the effective date of this subsection, whichever is later; and

(viii) Include any other elements that the department might require.

(c) The owner/operator of a surface impoundment or waste pile is exempted from the requirements of (a) and (b) of this subsection if:

(i) The owner/operator of a surface impoundment or waste pile can demonstrate to the department's satisfaction that the impoundment or pile is not used primarily for storage, but that it is primarily used to actively and effectively neutralize, detoxify, or other wise treat dangerous waste; or

(ii) The owner/operator of a surface impoundment or waste pile can demonstrate to the department's satisfaction that dangerous waste is removed on a frequent basis (at least four times a year) for treatment, recycling or disposal, provided that the amount of waste removed during any five-year period must equal or exceed the amount of waste placed in the impoundment or pile during that five-year period. However, this exemption does not apply to waste removal which

is being performed pursuant to a recycling or treatment plan developed and approved under (b) of this subsection; or

(iii) The owner/operator of a surface impoundment or waste pile has demonstrated, through his permit, closure plan or other instrument, that the impoundment or pile is being operated as a land disposal unit and that it will be closed as a landfill.

(6) Labeling for containers and tanks. The owner or operator must label containers and tanks in a manner which adequately identifies the major risk(s) associated with the contents for employees, emergency response personnel and the public (Note—If there is already a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate). The owner or operator must ensure that labels are not obscured, removed, or otherwise unreadable in the course of inspection required under WAC 173-303-320. For tanks, the label or sign must be legible at a distance of at least fifty feet. For containers, the owner or operator must affix labels upon transfer of dangerous waste from one container to another. The owner or operator must destroy or otherwise remove labels from the emptied container, unless the container will continue to be used for storing dangerous waste at the facility.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-395, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-395, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-395, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-395, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-395, filed 2/10/82.]

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) Except as provided in 40 CFR 265.1080(b), the interim status standards apply to owners and operators of facilities that treat, store, transfer, and/or dispose of dangerous waste. For purposes of this section, interim status applies to all facilities that 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 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). Interim status will end after final administrative disposition of the Part B permit application is completed, or may be terminated for the causes described in WAC 173-303-805(8).

(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) Reserved;

(iii) The owner or operator of a POTW who treats, stores, or disposes of dangerous wastes, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(4);

(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 has a permit by rule pursuant to the 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;

(vi) 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 or, in the case of repackaging of previously containerized waste into new containers, at the time the waste is first placed into the new containers and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(vii) The compaction or sorting, by a generator, of miscellaneous waste forms such as cans, rags, and bottles in a container, so long as the activity is solely for the purpose of reducing waste void space, and so long as these activities are conducted in a manner that protects human health and prevents any release to the environment and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(viii) Generators treating dangerous waste on-site in tanks, containers, or containment buildings that are used for accumulation of such wastes provided the generator complies with the WAC 173-303-170(3);

(ix) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in WAC 173-303-040, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in 40 CFR section 268.40, Table Treatment Standards for Hazardous Wastes), or reactive (D003) waste, to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in WAC 173-303-395 (1)(a); and

(x) 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.

(xi) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) handling the wastes listed below. These handlers are subject to regulation under WAC 173-303-573, when handling the below listed universal wastes.

(A) Batteries as described in WAC 173-303-573(2); and

(B) Thermostats as described in WAC 173-303-573(3).

(C) Lamps as described in WAC 173-303-573(5).

(xii) WAC 173-303-578 identifies when the requirements of this section apply to the storage of military munitions classified as solid waste under WAC 173-303-578(2). The treatment and disposal of dangerous waste military munitions are subject to the applicable permitting, procedural, and technical standards in this chapter.

(xiii)(A) Except as provided in (c)(xiii)(B) of this subsection, a person engaged in treatment or containment activities during immediate response to any of the following situations:

(I) A discharge of a dangerous waste;

(II) An imminent and substantial threat of a discharge of dangerous waste;

(III) A discharge of a material that, when discharged, becomes a dangerous waste;

(IV) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in WAC 173-303-040.

(B) An owner or operator of a facility otherwise regulated by WAC 173-303-600 must comply with all applicable requirements of WAC 173-303-340 and 173-303-350.

(C) Any person who is covered by (c)(xiii)(A) of this section and who continues or initiates dangerous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(D) In the case of an explosives or munitions emergency response, if a federal, state, tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA/state identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

(3) Standards.

(a) Interim status standards are the standards set forth by the Environmental Protection Agency in 40 CFR Part 265 Section 265.19 of Subpart B, Subparts F through R, Subpart W, Subparts AA, BB, CC (including references to 40 CFR Parts 60, 61, and 63), DD, EE, and Appendix VI, 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; the facility requirements of WAC 173-303-280 through 173-303-440 except WAC 173-303-335; and the corrective action requirements of WAC 173-303-646;

(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 (5)(d), 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, Subpart W, and Subparts AA, BB, CC, DD, and EE to the state of Washington facilities, the federal terms have (and in the case of the wording used in the financial instruments referenced in Subpart H of Part 265, must be replaced with) the following state of Washington meanings:

(i) "Regional administrator" means the "department" except for 40 CFR Parts 270.2; 270.3; 270.5; 270.10 (e)(1),(2) and (4); 270.10 (f) and (g); 270.11 (a)(3); 270.14 (b)(20); 270.32 (b)(2); and 270.51;

(ii) "Hazardous" means "dangerous" except for Subparts AA, BB, and DD. These subparts apply only to hazardous waste as defined in WAC 173-303-040;

(iii) "Compliance procedure" has the meaning set forth in WAC 173-303-040, Definitions;

(iv) "EPA hazardous waste numbers" mean "dangerous waste numbers".

(c) In addition to the changes described in (b) of this subsection, the following modifications are made to interim status standards of 40 CFR Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, CC, DD, and EE:

(i) The words "the effective date of these regulations" means:

(A) November 19, 1980, for facilities which manage any wastes designated by 40 CFR Part 261;

(B) For wastes which become designated by 40 CFR Part 261 subsequent to November 19, 1980, the effective date is the date on which the wastes become regulated;

(C) March 12, 1982, for facilities which manage wastes designated only by WAC 173-303-080 through 173-303-100 and not designated by 40 CFR Part 261;

(D) For wastes which become designated only by WAC 173-303-080 through 173-303-100 and not designated by 40 CFR Part 261 subsequent to March 12, 1982, the effective date is the date on which the wastes become regulated.

(ii) "Subpart N - landfills" has an additional section added which reads: "An owner/operator must not landfill an organic carcinogen or an EHW, as defined by WAC 173-303-080 through 173-303-100, except at the EHW facility at Hanford";

(iii) "Subpart R - underground injection" has 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 173-303-100";

(iv) "Subpart M - land treatment," section 265.273(b) is 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) includes the requirement that: "Ground water monitoring wells must be designed, constructed, and operated so as to prevent ground water contamination. Chapter 173-160 WAC may be used as guidance in the installation of wells";

(vi) "Subpart H - financial requirements" has 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". In 40 CFR Parts 265.143(g) and 265.145(g) the following sentence does not apply to the state: "If the facilities covered by the mechanisms are in more than one Region, identical evidence of financial assurance must be submitted to, and maintained with the Regional Administrators of all such Regions." Instead, the following sentence applies: "If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state." In addition, the following sections and any cross-reference to these sections are not incorporated by reference: 40 CFR Parts 265.149 and 265.150; and

(vii) "Subpart J - tank systems" section 265.193(a) is modified so that the dates by which secondary containment (which meets the requirements of that section) must be provided are the same as the dates in WAC 173-303-640 (4)(a).

(viii) "Subpart J - tank systems" section 265.191(a) is modified so that the date by which an assessment of a tank system's integrity must be completed is January 12, 1990.

(ix) "Subpart G - closure and post-closure" section 265.115 is modified to read "Within 60 days of completion of closure of each dangerous waste management unit (including tank systems and container storage areas) and within 60 days of completion of final closure..." In addition, the clean-up levels for removal or decontamination set forth at WAC 173-303-610 (2)(b) apply.

(x) "Subpart B - general facility standards. References to "EPA" (etc.), means the "department" except at 40 CFR 265.11. Additionally, references to "administrator" (etc.), means the "director" except at 40 CFR 265.12(a)."

(xi) The following sections and any cross-reference to these sections are not incorporated or adopted by reference:

(A) 40 CFR Parts 260.1 (b)(4)-(6) and 260.20-22.

(B) 40 CFR Parts 264.1 (d) and (f); 265.1 (c)(4); 264.149-150 and 265.149-150; 264.301(k); and 265.430.

(C) 40 CFR Parts 268.5 and 6; 268 Subpart B; 268.42(b); and 268.44 except for 268.44(h).

(D) 40 CFR Parts 270.1 (c)(1)(i); 270.60(b); and 270.64.

(E) 40 CFR Parts 124.1 (b)-(e); 124.4; 124.5(e); 124.9; 124.10 (a)(1)(iv); 124.12(e); 124.14(d); 124.15 (b)(2); 124.16; 124.17(b); 124.18; 124.19; and 124.21.

(F) 40 CFR Parts 2.106(b); 2.202(b); 2.205(i); 2.209 (b)-(c); 2.212-213; and 2.301-311.

(G) 40 CFR 265.110(c) and 40 CFR 265.121.

(xii) "Subpart EE - Hazardous waste munitions and explosives storage." The first sentence at 40 CFR 265.1202 is modified to exclude the exception for hazardous wastes managed under 261.3(d).

(4) The requirements of this section apply to owners or operators of all facilities that treat, store or dispose of hazardous waste referred to in 40 CFR Part 268, and the 40 CFR Part 268 standards are considered material conditions or requirements of the interim status standards incorporated by reference in subsection (3) of this section.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-400, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-400, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-400, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-400, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-400, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-400, filed 1/4/89; 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 173-303-430 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-430, filed 3/11/88; 84-09-088 (Order DE 83-36), § 173-303-430, filed 4/18/84.]

WAC 173-303-440 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-440, filed 3/11/88; 84-09-088 (Order DE 83-36), § 173-303-440, filed 4/18/84.]

WAC 173-303-500 Recycling requirements for state-only dangerous waste. (1) Applicability. This section applies to the recycling of state-only dangerous waste that are not regulated as hazardous wastes (defined in WAC 173-303-040) by EPA.

(2) Standards.

(a) If state-only dangerous wastes are recycled in any of the ways described in WAC 173-303-505 through 173-303-525, then such recycling is subject to the respective requirements of WAC 173-303-505 through 173-303-525, except as provided in (c) of this subsection.

(b) If state-only dangerous wastes are recycled in any way not specifically described in WAC 173-303-505 through 173-303-525, then such recycling is subject to the requirements of WAC 173-303-120(4), except as provided in (c) of this subsection.

(c) Recyclers who receive state-only dangerous wastes from off-site and who store the wastes in containers or tanks may, in lieu of the provisions for storing dangerous wastes prior to recycling, comply with:

(i) WAC 173-303-060;

(ii) WAC 173-303-370 (if the dangerous waste received must be accompanied by a manifest); and

(iii) The following requirements, provided that the dangerous waste is recycled within ninety days of the date it is received by the recycler:

(A) WAC 173-303-330 through 173-303-360;

(B) WAC 173-303-630 (2), (3), (4), (5), (6), (8) and (9), for containers;

(C) WAC 173-303-640 (3), (4), (5), (6) and (7), for tanks; and

(D) WAC 173-303-630(7) for new container areas installed after September 30, 1986, and WAC 173-303-640(2) for new tanks installed after September 30, 1986.

(d) The department may require a recycler who is storing his waste under the provisions of (c) of this subsection to comply with the provisions for storing dangerous waste prior to recycling specified in WAC 173-303-505 through 173-303-525 and 173-303-120(4) if:

(i) The recycler fails to comply with the requirements of (c) of this subsection; or

(ii) The department determines, on a case-by-case basis, that the requirements of (c) of this subsection do not adequately protect public health or the environment.

(3) Relief from standards. The owner/operator of a facility recycling dangerous wastes under the provisions of this section may ask the department to provide relief from any of the applicable requirements of this section. Requests for relief must be submitted as described in (a) of this subsection. Requests for relief will be approved or denied as described in (b) of this subsection.

(a) A request for relief must be submitted by the recycler to the department in writing and must describe the standards from which the recycler is seeking relief. The request must include:

(i) The facility name, EPA/state identification number, address, telephone number, and a contact person at the facility;

(ii) The waste(s) managed at the facility and the type(s) recycling;

(iii) The specific standards from which the owner/operator seeks relief;

(iv) A description, for each standard, demonstrating:

(A) Why the owner/operator believes the standard to be unnecessary;

(B) How public health and the environment will continue to be protected if the standard is not applied to the facility; and

(C) 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

(v) 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 information, including the possibility of fine and imprisonment."

The department may ask for any additional information it deems necessary, and will not consider approval of the owner's/operator's request until all necessary information has been submitted. Failure to provide any of the information required may result in the department's denying the owner's/operator's request.

(b) The department will review any requests submitted pursuant to (a) of this subsection, and based on the adequacy of the information provided in the request will approve or deny all or any part of the request. The department will notify the recycler of its decision in writing. If the department decides to approve all or part of the request and the recycler agrees with the department's decision, then the department will proceed to grant the approval as described below. No approval will be effective until the procedures described below have been completed.

(i) For facilities which are required to have a final facility permit, the department will follow the procedures for issuing (or, for facilities which already have a final facility permit, the procedures for modifying) a final facility permit, as described in WAC 173-303-806. The new or modified final facility permit will include the standards the owner/operator must meet.

(ii) For all other types of recycling facilities, the department will issue a notice of modification stating what standards will be applied. Before issuing the notice of modification, the department will provide public notice of its intent, will allow thirty days for public comment, and will 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 will be provided at least fifteen days in advance, and the public comment period will 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 will, based on comments received, issue, modify and issue, or deny the notice of modification.

(c) Failure to comply with the conditions and standards as stated in the permit or notice of modification issued under (b) of this subsection will form a basis for modifying or revoking the permit or notice of modification.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-500, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-500, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-500, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-500, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-500, filed 2/10/82.]

WAC 173-303-505 Special requirements for recyclable materials used in a manner constituting disposal. (1) Applicability.

(a) This section applies to recyclable materials that are applied to or placed on the land:

(i) Without mixing with any other substance(s); or

(ii) After mixing or combining with any other substance(s). These materials will be referred to as "materials used in a manner that constitutes disposal."

(b)(i) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if

the recyclable materials have undergone a chemical reaction in the course of producing the product so as to become inseparable by physical means and if such products meet the applicable treatment standards in 40 CFR Part 268 Subpart D (or applicable prohibition levels in 268.32 or RCRA section 3004(d), where no treatment standards have been established) for each recyclable material (i.e., hazardous waste) that they contain. Registered commercial fertilizers that are produced for the general public's use that contain recyclable materials also are not subject to regulation provided they meet these same treatment standards or prohibition levels for each recyclable material that they contain. For the purpose of implementation of this section, fertilizers that contain recyclable material derived from state-only waste must also meet the treatment standards in 40 CFR Part 268 Subpart D that apply to the characteristics of dangerous waste that the state-only waste exhibits. The prohibition levels for fertilizer using K061, in mg/l, are as follows: Arsenic, 5.0; Barium, 100.0; Cadmium, 1.0; Chromium (Total), 5.0; Lead, 5.0; Mercury, 0.20; Selenium, 5.7; and Silver, 5.0. The department may recommend registration under chapter 15.54 RCW for a waste-derived fertilizer (including fertilizers that contain recyclable material) or micronutrient fertilizer: Provided, That the registrant submits the information described in (b)(i)(A) or (B) of this subsection:

(A) Initial Criteria.

(I) The applicable Land Disposal Restriction (LDR) Certification as described in 40 CFR Part 268, or toxicity characteristic leaching procedure (TCLP) data that indicate the product contains less than the maximum concentrations for TCLP metals described in WAC 173-303-090(8); and

(II) Total Halogenated Organic Compounds (HOC) test data that indicate the product contains less than 1% total HOC.

(B) Secondary Criteria.

(I) A complete description of the fertilizer manufacturing process, including the location of the manufacturing facility; and

(II) A complete list of all ingredients used in manufacturing the fertilizer and a complete description of the sources of those ingredients, including a description of the original process and location for each of those ingredients; and

(III) Evidence that any waste(s) used in manufacturing the product does not designate as dangerous waste according to procedures described in WAC 173-303-070; and

(IV) Other information as required by the department.

(ii) Anti-skid/deicing uses of slags, which are generated from high temperature metals recovery (HTMR) processing of dangerous waste K061, K062, and F006, in a manner constituting disposal are not covered by the exemption in (b)(i) of this subsection and remain subject to regulation.

(2) Recyclable materials used in a manner that constitutes disposal are dangerous wastes and are subject to the following requirements:

(a) For generators, WAC 173-303-170 through 173-303-230;

(b) For transporters, WAC 173-303-240 through 173-303-270; and

(c) For facilities that store or use dangerous wastes in a manner constituting disposal, the applicable requirements of 40 CFR Part 268 (incorporated by reference in WAC 173-303-140 (2)(a) and 173-303-280 through 173-303-840 (except that users of such products are not subject to these standards if the products meet the requirements of subsection (1)(b) of this section).

(d) The use of waste oil, used oil, or other material that is contaminated with dioxin or any other dangerous waste for dust suppression or road treatment is prohibited.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-505, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-505, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-505, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-505, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-505, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-505, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-505, filed 4/18/84.]

WAC 173-303-506 Special requirements for the recycling of spent CFC or HCFC refrigerants. (1) Applicability.

(a) This section applies to spent chlorofluorocarbon (CFC) and hydrochlorofluorocarbon (HCFC) refrigerants that are reclaimed or recycled. Refrigerants eligible for these special requirements are those CFCs and HCFCs that were used as heat transfer material in a refrigeration cycle in totally enclosed heat transfer equipment and are subsequently reclaimed or recycled.

(b) Persons who generate, transport, or store spent CFC or HCFC refrigerants prior to reclamation or recycling and facilities that reclaim or recycle spent CFC or HCFC refrigerants are subject to the requirements of this section, and WAC 173-303-050, 173-303-145, and 173-303-960. Spent CFC or HCFC refrigerants that are not reclaimed or recycled are subject to all the applicable requirements of chapter 173-303 WAC. Any discharge of spent CFCs or HCFCs to the environment constitutes disposal and is subject to full regulation under chapter 173-303 WAC.

(2) Generator requirements.

(a) Persons who reclaim or recycle their spent CFC or HCFC refrigerants, either on-site or send their wastes off-site to be reclaimed or recycled, must keep records for a period of at least five years from the date of reclamation/recycling to document:

(i) The date of shipment (if sent off-site);

(ii) The quantity (by weight) reclaimed/recycled per shipment (when sent off-site) or batch (when recycled on-site);

(iii) The percentage of the total amount of CFC or HCFC wastes reclaimed/recycled per shipment or batch (and the manner of disposal for the remaining CFCs or HCFCs); and

(iv) The dates of reclamation/recycling.

(b) For CFCs or HCFCs sent off-site, the generator must obtain a signed document from the reclamation facility certifying the information in (a) of this subsection.

(3) Reclamation facility requirements.

(a) Facilities that reclaim or recycle CFC or HCFC refrigerants must comply with all the requirements of WAC 173-303-500 (except for WAC 173-303-500 (2)(c)(ii)). The applicable provisions of the following sections will also apply:

(i) WAC 173-303-280(2), General requirements for dangerous waste management facilities, imminent hazard;

(ii) WAC 173-303-283, Performance standards;

(iii) WAC 173-303-290 (1) and (2), Required notices;

(iv) WAC 173-303-380, Facility recordkeeping; except for WAC 173-303-380 (1)(c), (e), and (h);

(v) WAC 173-303-390(3), Facility reporting;

(vi) WAC 173-303-630(10), Use and management of containers;

(vii) WAC 173-303-640 (1), (2), (8), and (10), Tank systems, except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a) (i.e., a recycler, unless otherwise required to do so, does not have to prepare a closure plan, a cost estimate for closure, or provide financial responsibility for his tank system to satisfy the requirements of this section).

(b) The reclamation facility must supply generators with a signed document certifying the information in subsection (2)(a) of this section.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-506, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 93-02-050 (Order 92-32), § 173-303-506, filed 1/5/93, effective 2/5/93.]

WAC 173-303-510 Special requirements for dangerous wastes burned for energy recovery. (1) Applicability.

(a) This section applies to generators, marketers, transporters, blenders, and burners of dangerous waste fuels that are to be 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. These regulations do not apply to gas recovered from dangerous waste management activities when such gas is burned for energy recovery. Note: (This note is a reminder that all generators, transporters, and burners of federally regulated hazardous waste fuels that are to be burned for energy recovery, and all storage facility owners and operators of facilities that store dangerous waste that is burned in a boiler or industrial furnace must comply with the requirements of 40 CFR Part 266 Subpart H.)

(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 173-303-100; 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 173-303-100 (a) and (b) is subject to this section.

(ii) (Reserved.)

(2) Definitions. Any terms used in this section that are not defined below have the meanings provided in WAC 173-303-040. For the purposes of this section, the following terms have the described meanings:

(a) "Dangerous waste fuel" means dangerous waste burned or to be burned for energy recovery. Fuel produced from dangerous waste by processing, blending, or other treatment is also dangerous waste fuel.

(b) "Distributor" means persons who distribute but do not process or blend dangerous waste fuel. Distributors may broker fuel by arranging for the final disposition of the fuel. Distributors are regulated under subsection (6) of this section.

(c) "Blender" means persons who produce, process, or blend fuel from dangerous wastes. Blenders are regulated under subsection (7) of this section.

(d) "Marketer" means persons who are:

(i) Generators who market dangerous waste fuel directly to a burner. Generators are regulated under subsection (4) of this section;

(ii) Distributors, regulated under subsection (6) of this section;

(iii) Blenders, regulated under subsection (7) of this section.

(3) Prohibitions.

(a) A person may market dangerous waste fuel only:

(i) To persons, in state, who have notified the department of their dangerous waste fuel activities under WAC 173-303-060 and have an EPA/state identification number or to out-of-state marketers or burners who have notified the EPA or authorized state agency and who have an EPA/state identification number; and

(ii) When marketed to a burner, 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 the following devices only;

(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.

(4) Standards applicable to generators of dangerous waste fuel.

(a) All 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 are marketers. Generators are marketers if they send their waste fuel directly to a burner. Generators who are marketers must:

(i) Prohibitions. Comply with the prohibitions under subsection (3) of this subsection.

(ii) Notification. Comply with the notification requirements under WAC 173-303-060 for dangerous waste fuel activities. Generators who have previously notified the

department of their dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify their dangerous waste fuel activities.

(iii) Accumulation. Comply with accumulation requirements of WAC 173-303-200 or 173-303-201.

(iv) Storage. For generators who have interim or final status and exceed the accumulation time frames referenced in (b)(iii) of this subsection, comply with the storage provisions of:

(A) WAC 173-303-280 through 173-303-395; and

(B) WAC 173-303-800 through 173-303-840; and

(C) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-692 for final status facilities.

(v) Required notice. Obtain, prior to initiating the first shipment of dangerous waste fuel, a one time written and signed certification notice from the burner certifying that:

(A) The burner has notified as described under subsection (3) of this subsection; and

(B) The burner will burn the dangerous waste fuel only in an industrial furnace or boiler identified in subsection (3)(b) of this subsection.

(vi) Recordkeeping. Keep a copy of each certification notice received for at least five years from the date of the last dangerous waste fuel shipment to the burner who sent such notice.

(c) Generators who are burners also are subject to subsection (8) of this section.

(5) 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.

(6) Standards applicable to distributors of dangerous waste fuel.

(a) Prohibitions. The prohibitions under subsection (3) of this section;

(b) Notification. Notification requirements under WAC 173-303-060 for dangerous waste fuel activities. Distributors who have previously notified the department of their dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify their dangerous waste fuel activities.

(c) Storage. Distributors who store dangerous waste fuels must comply with the applicable storage provisions of:

(i) WAC 173-303-280 through 173-303-395; and

(ii) WAC 173-303-800 through 173-303-840; and

(iii) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-692 for final status facilities;

(iv) The standards for generators in WAC 173-303-170 through 173-303-230.

(d) Off-site shipment. A distributor must meet the standards for generators in WAC 173-303-170 through 173-303-230 when the distributor initiates a shipment of dangerous waste fuel. Except that a distributor may not accumulate dangerous waste fuels under the accumulation provisions of WAC 173-303-200 or 173-303-201;

(e) Required notices.

(i) Before initiating the first shipment of dangerous waste fuel to another distributor, a blender, or a burner, a distributor must obtain a one-time written and signed certification notice from the distributor, blender, or burner certifying that:

(A) The burner, distributor, or blender has notified as described under subsection (3) of this section; 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 (3)(b) of this section.

(ii) Before accepting the first shipment of dangerous waste fuel from another distributor or blender, the distributor must provide the other distributor or blender with a one-time written and signed certification that the distributor has complied with the notification requirements described in subsection (3) of this section; and

(f) Recordkeeping. A distributor must keep a copy of each certification notice received or sent for at least five years from the date the distributor last engaged in a dangerous waste fuel marketing transaction with the person who sent or received the certification notice.

(7) Standards applicable to blenders of dangerous waste fuels.

(a) Prohibitions. The prohibitions under subsection (3) of this section.

(b) Notification. Notification requirements under WAC 173-303-060 for dangerous waste fuel activities. Blenders who have previously notified the department of their dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify their dangerous waste fuel activities.

(c) Facility. For tanks, containers, or other units used to hold dangerous waste prior to blending or processing; for blending or processing tanks, containers, or other units; and for tanks, containers, or other units, used to hold blended or processed fuel, blenders must comply with the applicable provisions of:

(i) WAC 173-303-280 through 173-303-395; and

(ii) WAC 173-303-800 through 173-303-840; and

(iii) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-692 for final status facilities;

(d) Off-site shipment. The standards for generators in WAC 173-303-170 through 173-303-230 when a blender initiates a shipment of dangerous waste fuel, except that a blender may not accumulate dangerous waste fuels under the accumulation provisions of WAC 173-303-200 or 173-303-201;

(e) Required notices.

(i) Before initiating the first shipment of dangerous waste fuel to another blender, a distributor, or a burner, a blender must obtain a one-time written and signed certification notice from the blender, distributor, or burner certifying that:

(A) The burner, distributor, or blender has notified as described under subsection (3) of this section; 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 (3)(b) of this section.

(ii) Before accepting the first shipment of dangerous waste fuel from another blender or distributor, the blender must provide the other blender or distributor with a one-time

written and signed certification that the blender has complied with the notification requirements described in subsection (3) of this section; and

(f) Recordkeeping. A blender must keep a copy of each certification notice received or sent for at least five years from the date the blender last engaged in a dangerous waste fuel marketing transaction with the person who sent or received the certification notice.

(8) Standards applicable to burners of dangerous waste fuel.

Owners and operators of industrial furnaces and boilers identified in subsection (3)(b) of this section must comply with:

(a) Prohibitions. The prohibitions under subsection (3) of this section;

(b) Notification. Notification requirements under WAC 173-303-060 for dangerous waste fuel activities. A burner who has previously notified the department of dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify the dangerous waste fuel activities;

(c) Storage.

(i) For short term accumulation by generators who burn their dangerous waste fuel on-site, the applicable provisions of WAC 173-303-200 or 173-303-201.

(ii) For all burners who store dangerous waste fuel, the applicable storage provisions of:

(A) WAC 173-303-280 through 173-303-395;

(B) WAC 173-303-800 through 173-303-840; and

(C) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-692 for final status facilities (the air emission requirements do not apply to burners that meet the small quantity burner exemption at 40 CFR 266.101);

(d) Required notices. Before a burner accepts the first shipment of dangerous waste fuel from a distributor, or a blender, or a generator the burner must provide the distributor, or the blender, or the generator a one-time written and signed notice certifying that:

(i) The burner has notified as described under subsection (3) of this section; and

(ii) The dangerous waste fuel will only be burned in an industrial furnace or boiler identified in subsection (3)(b) of this section.

(e) Recordkeeping. In addition to the applicable recordkeeping requirements of WAC 173-303-380, a burner must keep a copy of each certification notice sent for at least five years from the date the burner last receives dangerous waste fuel from the person who received the certification notice.

(f) Local requirements. Any person who burns dangerous waste for energy recovery must comply with air emission requirements of the local air pollution control authority (or department of ecology if no local authority with jurisdiction exists).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-510, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-510, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-510, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-510, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-510, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-510, filed 3/11/88; 86-12-057 (Order DE-85-10), § 173-303-510, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-510, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-510, filed 2/10/82.]

WAC 173-303-515 Standards for the management of used oil. (1) **Purpose.** The purpose of this section is to provide used oil management standards for generators, transporters, collection centers, aggregation points, transfer facilities, processors, and re-refiners, burners, and marketers of used oil.

(2) **Definitions.** In addition to the terms used in this chapter, the definitions of 40 CFR Part 279 are incorporated by reference when managing used oil under this section. The term "hazardous waste" used in 40 CFR Part 279 means "dangerous waste" as defined in WAC 173-303-040.

(3) **Applicability.** This section identifies those materials subject to regulation as used oil. For the purpose of this section, the applicability statements of 40 CFR Part 279.10 are incorporated by reference, except 40 CFR Part 279.10 (b)(2) and (3), and as modified below.

Materials containing or otherwise contaminated with or derived from used oil: The term "materials" used in 40 CFR Part 279.10 does not include dangerous waste.

(4) **Used oil specifications.** For the purpose of managing materials under this section, 40 CFR Part 279.11 and 40 CFR Part 261.3 (a)(2)(v) (rebuttable presumption) are incorporated by reference.

The table is included below for the reader's convenience.

Table 1—Used Oil Exceeding any Specification Level is Subject to this Section When Burned for Energy Recovery

Constituent/property	Allowable level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100° F minimum
Total halogens	4,000 ppm maximum\1\

Note: Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR 761.20(e).

\1\ Used oil containing more than 1,000 ppm total halogens is presumed to be a dangerous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such used oil is subject to 40 CFR Subpart H of Part 266 rather than this section when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

(5) **Prohibitions.** The prohibitions of 40 CFR Part 279.12 are incorporated by reference. The prohibitions for managing materials under this section include those listed in 40 CFR Part 279.12 and the following:

(a) Materials designating as EHW or W001 cannot be managed under this section when burned for energy recovery. Note: Materials managed under this section containing 2 ppm or greater PCBs are subject to applicable requirements of 40 CFR Part 761.20(e).

(b) Metal working fluids that are formulated with chlorinated compounds such as chlorinated paraffins or chlorinated

alkene polymers cannot be managed under this section when burned for energy recovery.

(c) Ethylene glycol based fluids cannot be managed under this section. These fluids are subject to section WAC 173-303-522 when recycled.

(d) The use of used oil or other materials managed under this section as a dust suppressant is prohibited.

(e) Materials to be managed under this section are prohibited from being mixed with any dangerous waste. If any material managed under this section is mixed with dangerous waste, the resultant mixture is dangerous waste and must be managed as such.

(6) **Standards for used oil generators.** This subsection applies to all used oil generators and persons managing materials under this section. The standards for used oil generators of 40 CFR Parts 279.20 through 279.24 are incorporated by reference except 40 CFR Part 279.21. Used oil generators and persons managing materials under this subsection are subject to the federal regulations listed above and the following:

(a) Storage requirements for containers and tanks.

(i) Containers must be closed at all times, except when adding or removing materials managed under this section.

(ii) Containers and tanks must not be opened, handled, managed or stored in a manner that may cause the container or tank to leak or rupture.

(b) Secondary containment requirements for storage of material managed under this section in tanks and containers.

The department may require secondary containment, on a case-by-case basis, in accordance with some or all of the requirements in WAC 173-303-630(7) and 173-303-640(4) if the department determines that a potential for spills and discharges, mismanagement, or other factors pose a threat to human health or the environment.

(c) Self-transport to approved collection centers. In addition to 40 CFR Part 279.24(a), generators may self-transport quantities greater than 55 gallons to a used oil collection center: Provided, That the owner/operator of the center records the name, address, telephone number, date of delivery and quantity of used oil being delivered to the site by the generator.

(7) **Standards for used oil collection centers and aggregation points.** For the purpose of managing materials under this section, 40 CFR Parts 279.30 through 279.32 are incorporated by reference. The standards for used oil collection centers under this subsection are those federal regulations listed above and the following modifications:

In addition to the requirements of 40 CFR Part 279.31, the owner or operator of a used oil collection center may accept greater than 55 gallons of used oil from generators: Provided, That:

(a) The requirements for a used oil transfer facility (40 CFR Parts 279.40 through 279.47) are complied with while that used oil is on site; and

(b) The owner/operator of the collection center records the name, address, telephone number, date of delivery and quantity of used oil being delivered to the site by the generator of the used oil; and

(c) Such records are kept on site for a period of three years.

(8) **Standards for used oil transporters and transfer facilities.** For the purpose of managing materials under this section, 40 CFR Parts 279.40 through 279.47 are incorporated by reference. The standards for used oil transfer facilities under this subsection are those federal regulations listed above and the following modifications:

Additional reports. Upon determination by the department that the storage of used oil in tanks and/or containers poses a threat to public health or the environment, the department may require the owner/operator to provide additional information regarding the integrity of structures and equipment used to store used oil. This authority applies to tanks and secondary containment systems used to store used oil in tanks and containers. The department's determination of a threat to public health or the environment may be based upon observations of factors that would contribute to spills or releases of used oil or the generation of hazardous by-products (e.g., hydrogen sulfide gas). Those observations may include, but are not limited to, leaks, severe corrosion, structural defects or deterioration (cracks, gaps, separation of joints), inability to completely inspect tanks or structures, or concerns about the age or design specification of tanks.

(a) When required by the department, a qualified, independent professional engineer registered to practice in Washington state must perform the assessment of the integrity of tanks or secondary containment systems.

(b) Requirement for facility repairs and improvements. If, upon evaluation of information obtained by the department under (a) of this subsection, it is determined that repairs or structural improvements are necessary in order to eliminate threats, the department may require the owner/operator to discontinue the use of the tank system or container storage unit and remove the used oil until the repairs or improvements are completed and approved by the department.

(9) **Standards for used oil processors and re-refiners.** For the purpose of managing materials under this section, 40 CFR Parts 279.50 through 279.59 are incorporated by reference. The standards for used oil processors and re-refiners under this subsection are those federal regulations listed above and the following:

(a) In addition to the general facility standards of 40 CFR Part 279.52, used oil and other materials managed under this subsection may be stored on-site without a permit for ninety days prior to entering an active recycling process. An active recycling process refers to a dynamic recycling operation that occurs within the recycling unit such as a distillation or centrifuge unit. The phrase does not refer to passive storage-like activities that occur, for example, when tanks or containers are used for phase separation or for settling impurities.

(b) Additional reports. Upon determination by the department that the storage of used oil in tanks and/or containers poses a threat to public health or the environment, the department may require the owner/operator to provide additional information regarding the integrity of structures and equipment used to store used oil. This authority applies to tanks and secondary containment systems used to store used oil in tanks and containers. The department's determination of a threat to public health or the environment may be based upon observations of factors that would contribute to spills or releases of used oil or the generation of hazardous by-prod-

ucts (for example, hydrogen sulfide gas). Those observations may include, but are not limited to, leaks, severe corrosion, structural defects or deterioration (cracks, gaps, separation of joints), inability to completely inspect tanks or structures, or concerns about the age or design specification of tanks.

(i) When required by the department, a qualified, independent professional engineer registered to practice in Washington state must perform the assessment of the integrity of tanks or secondary containment systems.

(ii) Requirement for facility repairs and improvements. If, upon evaluation of information obtained by the department under (b) of this subsection, it is determined that repairs or structural improvements are necessary in order to eliminate threats, the department may require the owner/operator to discontinue the use of the tank system or container storage unit and remove the used oil until such repairs or improvements are completed and approved by the department.

(10) **Standards for used oil burners who burn off-specification.** For the purpose of managing materials under this subsection, 40 CFR Parts 279.60 through 279.67 are incorporated by reference.

(11) **Standards for used oil fuel marketers.** For the purpose of managing materials under this subsection, 40 CFR Parts 279.70 through 279.75 are incorporated by reference.

(12) **Standards for disposal of used oil.** For the purpose of managing materials under this subsection, 40 CFR Parts 279.80 through 279.82(a) are incorporated by reference.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-515, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-515, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-515, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-515, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-515, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-515, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-515, filed 6/27/84.]

WAC 173-303-520 Special requirements for reclaiming spent lead acid battery wastes. This section applies to persons who reclaim (including regeneration) spent lead-acid batteries that are recyclable materials ("spent batteries").

(1) Persons who generate, transport, or collect spent batteries, who regenerate spent batteries, or who store spent batteries but do not reclaim them (other than spent batteries that are to be regenerated) are subject only to the requirements of WAC 173-303-016 through 173-303-161 except for 173-303-060, and WAC 173-303-960 if such spent batteries are going to a battery reclaimer. Persons who reclaim spent batteries through regeneration (such as by electrolyte replacement) are not subject to 40 CFR Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a).

(2) Owners and operators of battery reclaiming facilities that store spent lead acid batteries prior to reclaiming (other than spent batteries that are to be regenerated) 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 173-303-282;

(iii) WAC 173-303-283;

(iv) WAC 173-303-290;

(v) WAC 173-303-310 through 173-303-360;

(vi) WAC 173-303-380;

(vii) WAC 173-303-390 (2) and (3);

(viii) WAC 173-303-395; 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.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-520, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-520, filed 1/12/98, effective 2/12/98; 94-01-060 (Order 92-33), § 173-303-520, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-520, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-520, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-520, filed 3/11/88; 86-12-057 (Order DE-85-10), § 173-303-520, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-520, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-520, filed 2/10/82.]

WAC 173-303-522 Special requirements for recycling spent antifreeze. (1) Applicability. This section applies to the recycling of spent antifreeze. Antifreeze means ethylene glycol based coolant used as a heat exchange medium in motor vehicle radiators, motorized equipment, or in other industrial processes. For the purposes of this section recycling means reclamation and reuse, but not burning for energy recovery.

(2) Standards. Persons who generate, transport, or store spent antifreeze but do not reclaim or recycle it are subject to the requirements of WAC 173-303-050, 173-303-145, and 173-303-960 if their spent antifreeze is going to a recycler. Any discharge of spent antifreeze to the environment constitutes disposal and is subject to full regulation under this chapter.

(a) Generator requirements:

(i) Persons who reclaim or recycle their spent antifreeze on-site, or send their antifreeze off-site to be reclaimed or recycled, must keep records for a period of five years from the date of reclamation/recycling.

Proof of reclamation/recycling is either a log for on-site reclamation/recycling or an invoice or bill of lading for off-site reclamation/recycling.

(ii) Containers and tanks used to accumulate spent antifreeze must be labeled "spent antifreeze."

(iii) Spent antifreeze that is to be reclaimed can be accumulated on-site for any length of time, and in any amount.

(iv) During accumulation, spent antifreeze must be stored in a manner to prevent releases to the environment. This includes, but is not limited to, storing wastes in compatible containers, on impermeable surfaces, or in secondary containment structures.

(b) If spent antifreeze is mixed with another dangerous waste, generators are subject to the generator requirements, WAC 173-303-170 through 173-303-230.

(c) Persons who generate spent antifreeze that is not reclaimed/recycled, but is otherwise disposed, are subject to all applicable requirements of this chapter.

(3) Transporters and transfer facility requirements:

(a) Persons engaged in routine off-site transportation of spent antifreeze are required to obtain a state/EPA ID number, WAC 173-303-060, and to comply with the transporter requirements, WAC 173-303-240.

(b) If spent antifreeze is mixed with another dangerous waste, transporters are subject to the generator requirements, WAC 173-303-170 through 173-303-230.

(c) Transporters who store spent antifreeze at a transfer facility are allowed to use tanks or containers as defined in WAC 173-303-040, and store such waste for up to ten days, WAC 173-303-240(5).

Transporters may store spent antifreeze at a transfer facility for longer than ten days if they meet the requirements for tank and/or container management, including secondary containment in WAC 173-303-630 through 173-303-640.

(4) Reclamation/recycling facility requirements: Owners and operators of antifreeze reclaiming/recycling facilities are subject to the conditions of WAC 173-303-120 (4)(c). These conditions apply equally to facilities whether or not twenty-four-hour storage of spent antifreeze occurs prior to reclamation.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-522, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-522, filed 1/12/98, effective 2/12/98.]

WAC 173-303-525 Special requirements for recyclable material utilized for precious metal recovery. (1) Applicability and requirements.

(a) This section applies to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these.

(b) Persons who generate, transport, or store recyclable materials that are regulated under this section are subject to the following requirements:

(i) Notification requirements under WAC 173-303-060;

(ii) WAC 173-303-180 (for generators), 173-303-250 (for transporters), and 173-303-370 (for persons who store).

(c) Persons who store recycled materials that are regulated under this section must keep the following records to document that they are not accumulating these materials speculatively (as defined in WAC 173-303-016 (5)(d)(ii));

(i) Records showing the volume of these materials stored at the beginning of the calendar year;

(ii) The amount of these materials generated or received during the calendar year; and

(iii) The amount of materials remaining at the end of the calendar year.

(d) Recyclable materials that are regulated under this section that are accumulated speculatively (as defined in WAC 173-303-016 (5)(d)(ii)) are dangerous wastes and are subject to all applicable provisions of this chapter.

(2) Additional regulation of recyclable materials utilized for precious metal recovery on a case-by-case basis.

The department may decide on a case-by-case basis that persons accumulating or storing recyclable materials utilized for precious metal recovery should be regulated under WAC 173-303-120(4). The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained, or because the materials being accumulated or stored together are incompatible. In making this decision, the department will consider the following factors:

(a) The types of materials accumulated or stored and the amounts accumulated or stored;

(b) The method of accumulation or storage;

(c) The length of time the materials have been accumulated or stored before being reclaimed;

(d) Whether any contaminants are being released into the environment, or are likely to be so released; and

(e) Other relevant factors.

The procedures for this decision are set forth in subsection (3) of this section.

(3) Procedures for case-by-case regulation of recyclable materials utilized for precious metal recovery.

The department will use the following procedures when determining whether to regulate recyclable materials utilized for precious metal recovery under the provisions of WAC 173-303-120(4), rather than under the provisions of subsection (1) of this section.

(a) If a generator is accumulating the waste, the department will issue a notice setting forth the factual basis for the decision and stating that the person must comply with the applicable requirements of WAC 173-303-170 and 173-303-190 through 173-303-230. The notice will become final within thirty days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the department will hold a public hearing. The department will provide notice of the hearing to the public and allow public participation at the hearing. The department will issue a final order after the hearing stating whether or not compliance with WAC 173-303-170 and 173-303-190 through 173-303-230 is required. The order becomes effective thirty days after service of the decision unless the department specifies a later date or unless review by the department is requested. The order may be appealed to the pollution control hearings board, in accordance with WAC 173-303-845, by any person who participated in the public hearing.

(b) If the person is accumulating the recyclable material as a storage facility, the notice will state that the person must obtain a permit in accordance with all applicable provisions of WAC 173-303-800 through 173-303-840. The owner or operator of the facility must apply for a permit within no less than sixty days and no more than six months of notice, as specified in the notice. If the owner or operator of the facility wishes to challenge the department's decision he may do so in his permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit will specify the reasons for the department's determination. The question of whether the department's

decision was proper will remain open for consideration during the public comment period discussed under WAC 173-303-840 (4)(d) and in any subsequent hearing.

[Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-525, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-525, filed 6/3/86.]

WAC 173-303-550 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-550, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-550, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-550, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-550, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-550, filed 4/18/84.]

WAC 173-303-560 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-560, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-560, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-560, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-560, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-560, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-560, filed 4/18/84.]

WAC 173-303-573 Standards for universal waste management.

(1) **Scope.**

(a) This section establishes requirements for managing the following:

(i) Batteries as described in subsection (2) of this section;

(ii) Thermostats as described in subsection (3) of this section; and

(iii) Lamps as described in subsection (5) of this section.

(b) This section provides an alternative set of management standards in lieu of regulation under the rest of this chapter except for WAC 173-303-050, 173-303-145, and 173-303-960.

(2) **Applicability—Batteries.**

(a) Batteries covered under this section.

(i) The requirements of this section apply to persons managing batteries, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(ii) Spent lead-acid batteries which are not managed under WAC 173-303-120 (3)(f) and 173-303-520, are subject to management under this section.

(b) Batteries not covered under this section. The requirements of this section do not apply to persons managing the following batteries:

(i) Spent lead-acid batteries that are managed under WAC 173-303-120(3) and 173-303-520.

(ii) Batteries, as described in WAC 173-303-040, that are not yet wastes under WAC 173-303-016, 173-303-017, or 173-303-070, including those that do not meet the criteria for waste generation in (c) of this subsection.

(iii) Batteries, as described in WAC 173-303-040, that are not dangerous waste. A battery is a dangerous waste if it exhibits one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100.

(c) Generation of waste batteries.

(i) A used battery becomes a waste on the date it is discarded (e.g., when sent for reclamation).

(ii) An unused battery becomes a waste on the date the handler decides to discard it.

(3) **Applicability—Mercury thermostats.**

(a) Thermostats covered under this section. The requirements of this section apply to persons managing thermostats, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(b) Thermostats not covered under this section. The requirements of this section do not apply to persons managing the following thermostats:

(i) Thermostats that are not yet wastes under WAC 173-303-016, 173-303-017, or 173-303-070. Paragraph (c) of this subsection describes when thermostats become wastes.

(ii) Thermostats that are not dangerous waste. A thermostat is a dangerous waste if it exhibits one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100.

(c) Generation of waste thermostats.

(i) A used thermostat becomes a waste on the date it is discarded (e.g., sent for reclamation).

(ii) An unused thermostat becomes a waste on the date the handler decides to discard it.

(4) **Applicability—Household and conditionally exempt small quantity generator waste.**

(a) Persons managing the wastes listed below may, at their option, manage them under the requirements of this section:

(i) Household wastes that are exempt under WAC 173-303-071 (3)(c) and are also of the same type as the universal wastes defined at WAC 173-303-040; and/or

(ii) Small quantity generator wastes that are conditionally exempt under WAC 173-303-070(8) and are also of the same type as the universal wastes defined at WAC 173-303-040.

(b) Persons who commingle the wastes described in (a)(i) and (ii) of this subsection together with universal waste regulated under this section must manage the commingled waste under the requirements of this section.

(5) **Applicability—Lamps.**

(a) Lamps covered under this section. The requirements of this section apply to persons managing lamps, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(b) Lamps not covered under this section. The requirements of this section do not apply to persons managing the following lamps:

(i) Lamps that are not yet wastes under WAC 173-303-016, 173-303-017, or 173-303-070. Paragraph (c) of this subsection describes when lamps become wastes.

(ii) Lamps that are not dangerous waste. Lamps that do not exhibit one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100 are not dangerous waste.

(c) Generation of waste lamps.

(i) A used lamp becomes a waste on the date it is discarded.

(ii) An unused lamp becomes a waste on the date the handler decides to discard it.

(6) **Applicability—Small quantity handlers of universal waste.** Subsections (6) through (16) of this section apply to small quantity handlers of universal waste (as defined in WAC 173-303-040).

(7) **Prohibitions.**

A small quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (13) of this section; or by managing specific wastes as provided in subsection (9) of this section.

(8) **Notification.**

A small quantity handler of universal waste is not required to notify the department of universal waste handling activities.

(9) **Waste management.**

(a) Universal waste batteries. A small quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

(A) Sorting batteries by type;

(B) Mixing battery types in one container;

(C) Discharging batteries so as to remove the electric charge;

(D) Regenerating used batteries;

(E) Disassembling batteries or battery packs into individual batteries or cells;

(F) Removing batteries from consumer products; or

(G) Removing electrolyte from batteries.

(iii) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100.

(A) If the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it is subject to all applicable requirements of this chapter. The handler is considered the generator of the dangerous electrolyte and/or other waste and is subject to WAC 173-303-170 through 173-303-230.

(B) If the electrolyte or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Universal waste thermostats. A small quantity handler of universal waste must manage universal waste thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A small quantity handler of universal waste must contain any universal waste thermostat that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the thermostat, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste thermostats provided the handler:

(A) Removes the ampules in a manner designed to prevent breakage of the ampules;

(B) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);

(C) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from the containment device to a container that meets the requirements of WAC 173-303-200;

(D) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of WAC 173-303-200;

(E) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(F) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(G) Stores removed ampules in closed, nonleaking containers that are in good condition;

(H) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and

(iii)(A) A small quantity handler of universal waste who removes mercury-containing ampules from thermostats must determine whether the following exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100:

(I) Mercury or clean-up residues resulting from spills or leaks; and/or

(II) Other solid waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units).

(B) If the mercury, residues, and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it must be managed in compliance with all applicable requirements of this chapter. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it subject to WAC 173-303-170 through 173-303-230.

(C) If the mercury, residues, and/or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(c) Universal waste lamps. A small quantity handler of universal waste must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A small quantity handler of universal waste must immediately clean up and place in a container any universal waste lamps that show evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the lamps, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(ii) A small quantity handler of universal waste must minimize lamp breakage by accumulating lamps in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. The containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(iii) A small quantity handler of universal waste must store lamps accumulated in cardboard or fiber containers indoors, meaning in a structure that prevents the container from being exposed to the elements.

(10) **Labeling/marking.**

A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries (i.e., each battery), or a container in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste-Battery(ies), or "Waste Battery(ies)," or "Used Battery(ies);"

(b) Universal waste thermostats (i.e., each thermostat), or a container in which the thermostats are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste-Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

(c) Universal waste lamps (i.e., each lamp), or a container in which the lamps are accumulated, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

(11) **Accumulation time limits.**

(a) A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of (b) of this subsection are met.

(b) A small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

(c) A small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

(i) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(ii) Marking or labeling each individual item of universal waste (for example, each battery, thermostat or lamp) with the date it became a waste or was received;

(iii) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;

(iv) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(v) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

(vi) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

(12) **Employee training.**

A small quantity handler of universal waste must inform all employees who handle or have responsibility for managing universal waste. The information must describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.

(13) **Response to releases.**

(a) A small quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A small quantity handler of universal waste must determine whether any material resulting from the release is dangerous waste, and if so, must manage the dangerous waste in compliance with all applicable requirements of this chapter. The handler is considered the generator of the material resulting from the release, and must manage it in compliance with WAC 173-303-170 through 173-303-230.

(14) **Off-site shipments.**

(a) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subsections (28) through (34) of this section while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR Parts 171 through 180, a small quantity handler of universal waste must package, label, mark and placard the

shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 172 through 180.

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.

(e) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:

(i) Receive the waste back when notified that the shipment has been rejected, or

(ii) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:

(i) Send the shipment back to the originating handler; or

(ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a small quantity handler of universal waste receives a shipment containing dangerous waste that is not a universal waste, the handler must immediately notify the department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The department will provide instructions for managing the dangerous waste.

(h) If a small quantity handler of universal waste receives a shipment of nondangerous, nonuniversal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(15) **Tracking universal waste shipments.**

A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

(16) **Exports.**

A small quantity handler of universal waste who sends universal waste to a foreign destination must:

(a) Comply with the requirements applicable to a primary exporter in 40 CFR 262.53, 262.56(a) (1) through (4), (6), and (b) and 262.57 which are incorporated by reference at WAC 173-303-230(1);

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in 40 CFR Subpart E of Part 262 which is incorporated by reference at WAC 173-303-230(1); and

(c) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

(17) **Applicability—Large quantity handlers of universal waste.**

Subsections (17) through (27) of this section apply to large quantity handlers of universal waste (as defined in WAC 173-303-040).

(18) **Prohibitions.**

A large quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (24) of this section; or by managing specific wastes as provided in subsection (20) of this section.

(19) **Notification.**

(a)(i) Except as provided in (a)(ii) of this subsection, a large quantity handler of universal waste must have sent written notification of universal waste management to the department, and received an EPA Identification Number, before meeting or exceeding the 11,000 pound storage limit and/or before meeting or exceeding the 2,200 pound storage limit for lamps.

(ii) A large quantity handler of universal waste who has already notified the department of their dangerous waste management activities and has received an EPA Identification Number is not required to renotify under this section.

(b) This notification must include:

(i) The universal waste handler's name and mailing address;

(ii) The name and business telephone number of the person at the universal waste handler's site who should be contacted regarding universal waste management activities;

(iii) The address or physical location of the universal waste management activities;

(iv) A list of all of the types of universal waste managed by the handler (e.g., batteries, thermostats or lamps);

(v) A statement indicating that the handler is accumulating more than 11,000 pounds of universal waste at one time and the types of universal waste (e.g., batteries, thermostats or lamps) the handler is accumulating above this quantity, and/or a statement indicating that the handler is accumulating more than 2,200 pounds of lamps at one time. (For example, if a handler is accumulating 5,000 pounds of batteries, 5,500 pounds of thermostats and 600 pounds of universal waste lamps, they would notify for having 11,100 pounds of universal waste at one time - likewise, if a handler is accumulating 2,000 pounds of batteries, 5,000 pounds of thermostats and 2,400 pounds of universal waste lamps, they would also need to notify for exceeding the 2,200 pound limit for universal waste lamps.)

(20) **Waste management.**

(a) Universal waste batteries. A large quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A large quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

(A) Sorting batteries by type;

(B) Mixing battery types in one container;

(C) Discharging batteries so as to remove the electric charge;

(D) Regenerating used batteries;

(E) Disassembling batteries or battery packs into individual batteries or cells;

(F) Removing batteries from consumer products; or

(G) Removing electrolyte from batteries.

(iii) A large quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100.

(A) If the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it must be managed in compliance with all applicable requirements of this chapter. The handler is considered the generator of the dangerous electrolyte and/or other waste and is subject to WAC 173-303-170 through 173-303-230.

(B) If the electrolyte or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Universal waste thermostats. A large quantity handler of universal waste must manage universal waste thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must contain any universal waste thermostat that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the thermostat, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste thermostats provided the handler:

(A) Removes the ampules in a manner designed to prevent breakage of the ampules;

(B) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to contain any mercury released from an ampule in case of breakage);

(C) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from the containment device to a container that meets the requirements of WAC 173-303-200;

(D) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of WAC 173-303-200;

(E) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(F) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(G) Stores removed ampules in closed, nonleaking containers that are in good condition;

(H) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and

(iii)(A) A large quantity handler of universal waste who removes mercury-containing ampules from thermostats must determine whether the following exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100:

(I) Mercury or clean-up residues resulting from spills or leaks; and/or

(II) Other solid waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units).

(B) If the mercury, residues, and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it must be managed in compliance with all applicable requirements of this chapter. The handler is considered the generator of the mercury, residues, and/or other waste and is subject to WAC 173-303-170 through 173-303-230.

(C) If the mercury, residues, and/or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(c) Universal waste lamps. A large quantity handler of universal waste must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must immediately clean up and place in a container any universal waste lamps that show evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the lamps, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(ii) A large quantity handler of universal waste must minimize lamp breakage by accumulating lamps in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. The containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(iii) A large quantity handler of universal waste must store lamps accumulated in cardboard or fiber containers indoors, meaning in a structure that prevents a container from being exposed to the elements.

(21) **Labeling/marking.**

A large quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries (i.e., each battery), or a container or tank in which the batteries are contained, must be labeled or marked clearly with the any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"

(b) Universal waste thermostats (i.e., each thermostat), or a container or tank in which the thermostats are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste-Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

(c) Universal waste lamp (i.e., each lamp), or a container in which the lamps are accumulated, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

(22) **Accumulation time limits.**

(a) A large quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of (b) of this subsection are met.

(b) A large quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity was solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

(c) A large quantity handler of universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

(i) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(ii) Marking or labeling the individual item of universal waste (for example, each battery, thermostat or lamp) with the date it became a waste or was received;

(iii) Maintaining an inventory system on site that identifies the date the universal waste being accumulated became a waste or was received;

(iv) Maintaining an inventory system on site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(v) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

(vi) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

(23) **Employee training.**

A large quantity handler of universal waste must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies.

(24) **Response to releases.**

(a) A large quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A large quantity handler of universal waste must determine whether any material resulting from the release is dangerous waste, and if so, must manage the dangerous waste in compliance with all applicable requirements of this chapter. The handler is considered the generator of the material resulting from the release, and is subject to WAC 173-303-145 and 173-303-170 through 173-303-230.

(25) **Off-site shipments.**

(a) A large quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a large quantity handler of universal waste self-transports universal waste off site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subsections (28) through (34) of this section while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR 171 through 180, a large quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 172 through 180;

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.

(e) If a large quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:

(i) Receive the waste back when notified that the shipment has been rejected; or

(ii) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A large quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:

(i) Send the shipment back to the originating handler; or

(ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a large quantity handler of universal waste receives a shipment containing dangerous waste that is not a universal waste, the handler must immediately notify the department of the illegal shipment, and provide the name, address, and

phone number of the originating shipper. The department will provide instructions for managing the dangerous waste.

(h) If a large quantity handler of universal waste receives a shipment of nondangerous, nonuniversal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(26) **Tracking universal waste shipments.**

(a) Receipt of shipments. A large quantity handler of universal waste must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:

(i) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;

(ii) The quantity of each type of universal waste received (for example, batteries, thermostats or lamps);

(iii) The date of receipt of the shipment of universal waste.

(b) Shipments off site. A large quantity handler of universal waste must keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading or other shipping document. The record for each shipment of universal waste sent must include the following information:

(i) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;

(ii) The quantity of each type of universal waste sent (for example, batteries, thermostats or lamps);

(iii) The date the shipment of universal waste left the facility.

(c) Record retention.

(i) A large quantity handler of universal waste must retain the records described in (a) of this subsection for at least three years from the date of receipt of a shipment of universal waste.

(ii) A large quantity handler of universal waste must retain the records described in (b) of this subsection for at least three years from the date a shipment of universal waste left the facility.

(27) **Exports.**

A large quantity handler of universal waste who sends universal waste to a foreign destination must:

(a) Comply with the requirements applicable to a primary exporter in 40 CFR 262.53, 262.56(a) (1) through (4), (6), and (b) and 262.57 which are incorporated by reference at WAC 173-303-230(1);

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in 40 CFR 262 Subpart E which is incorporated by reference at WAC 173-303-230(1); and

(c) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

(28) **Applicability—Universal waste transporters.**

Subsections (28) through (34) of this section apply to universal waste transporters (as defined in WAC 173-303-040).

(29) **Prohibitions.**

A universal waste transporter is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (32) of this section.

(30) **Waste management.**

(a) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in 49 CFR Part 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 CFR 171.8. For purposes of the Department of Transportation regulations, a material is considered a dangerous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in WAC 173-303-180. Because universal waste does not require a dangerous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.

(b) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 CFR 173.2. As universal waste shipments do not require a manifest under WAC 173-303-180, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.," nor may the hazardous material's proper shipping name be modified by adding the word "waste."

(31) **Storage time limits.**

(a) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.

(b) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements for small or large quantity handlers (subsections (6) through (27) of this section) while storing the universal waste.

(32) **Response to releases.**

(a) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A universal waste transporter must determine whether any material resulting from the release is dangerous waste, and if so, it is subject to all applicable requirements of this chapter. If the waste is determined to be a dangerous waste, the transporter is subject to WAC 173-303-145 and 173-303-170 through 173-303-230.

(33) **Off-site shipments.**

(a) A universal waste transporter is prohibited from transporting the universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.

(b) If the universal waste being shipped off site meets the Department of Transportation's definition of hazardous materials under 49 CFR 171.8, the shipment must be properly described on a shipping paper in accordance with the applica-

ble Department of Transportation regulations under 49 CFR Part 172.

(34) **Exports.**

A universal waste transporter transporting a shipment of universal waste to a foreign destination may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter must ensure that:

(a) A copy of the EPA Acknowledgment of Consent accompanies the shipment; and

(b) The shipment is delivered to the facility designated by the person initiating the shipment.

(35) **Applicability—Destination facilities.** Subsections (35) through (37) of this section apply to destination facilities.

(a) The owner or operator of a destination facility (as defined in WAC 173-303-040) is subject to all applicable requirements of WAC 173-303-140 and 173-303-141, 173-303-280 through 173-303-525, 173-303-600 through 173-303-695, 173-303-800 through 173-303-840, and the notification requirement at WAC 173-303-060:

(b) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled must comply with WAC 173-303-120 (4)(c).

(36) **Off-site shipments.**

(a) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or foreign destination.

(b) The owner or operator of a destination facility may reject a shipment containing universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, he must contact the shipper to notify him of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility must:

(i) Send the shipment back to the original shipper; or

(ii) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.

(c) If the owner or operator of a destination facility receives a shipment containing dangerous waste that is not a universal waste, the owner or operator of the destination facility must immediately notify the department of the illegal shipment, and provide the name, address, and phone number of the shipper. The department will provide instructions for managing the dangerous waste.

(d) If the owner or operator of a destination facility receives a shipment of nondangerous, nonuniversal waste, the owner or operator may manage the waste in any way that is in compliance with applicable federal or state solid waste regulations.

(37) **Tracking universal waste shipments.**

(a) The owner or operator of a destination facility must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:

(i) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;

(ii) The quantity of each type of universal waste received (for example, batteries or thermostats);

(iii) The date of receipt of the shipment of universal waste.

(b) The owner or operator of a destination facility must retain the records described in (a) of this subsection for at least three years from the date of receipt of a shipment of universal waste.

(38) **Imports.**

Persons managing universal waste that is imported from a foreign country into the United States are subject to the applicable requirements of this section, immediately after the waste enters the United States, as indicated below:

(a) A universal waste transporter is subject to the universal waste transporter requirements of subsections (28) through (34) of this section.

(b) A universal waste handler is subject to the small or large quantity handler of universal waste requirements of subsections (6) through (27) of this section, as applicable.

(c) An owner or operator of a destination facility is subject to the destination facility requirements of subsections (35) through (37) of this section.

(39) **General—Petitions.** Subsections (39) and (40) of this section address petitions to include other wastes under this section.

(a) Any person seeking to add a dangerous waste or a category of dangerous waste to this section may petition for a regulatory amendment under subsections (39) and (40) of this section and WAC 173-303-910 (1) and (7).

(b) To be successful, the petitioner must demonstrate to the satisfaction of the department that regulation under the universal waste regulations of this section is: Appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the dangerous waste program. The petition must include the information required by WAC 173-303-910 (1)(b). The petition should also address as many of the factors listed in subsection (40) of this section as are appropriate for the waste or waste category addressed in the petition.

(c) The department will evaluate petitions using the factors listed in subsection (40) of this section. The department will grant or deny a petition using the factors listed in subsection (40) of this section. The decision will be based on the weight of evidence showing that regulation under this section is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the dangerous waste program.

(40) **Factors for petitions to include other wastes under this section.**

(a) The waste or category of waste, as generated by a wide variety of generators, is listed in WAC 173-303-081 or 173-303-082, or (if not listed) a proportion of the waste stream exhibits one or more characteristics or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100. (When a characteristic waste is added to the universal

waste regulations of this section by using a generic name to identify the waste category (e.g., batteries), the definition of universal waste in WAC 173-303-040 will be amended to include only the dangerous waste portion of the waste category (e.g., dangerous waste batteries).) Thus, only the portion of the waste stream that does exhibit one or more characteristics or criteria (i.e., is dangerous waste) is subject to the universal waste regulations of this section;

(b) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, conditionally exempt small quantity generators, small businesses, government organizations, as well as large industrial facilities);

(c) The waste or category of waste is generated by a large number of generators (e.g., more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;

(d) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;

(e) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other dangerous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to subsections (9), (20), and (30) of this section; and/or applicable Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;

(f) Regulation of the waste or category of waste under this section will increase the likelihood that the waste will be diverted from nondangerous waste management systems (e.g., the municipal waste stream, nondangerous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with the Hazardous Waste Management Act chapter 70.105 RCW, this chapter, and RCRA Subtitle C.

(g) Regulation of the waste or category of waste under this section will improve implementation of and compliance with the dangerous waste regulatory program; and/or

(h) Such other factors as may be appropriate.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-573, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-573, filed 1/12/98, effective 2/12/98.]

WAC 173-303-575 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-575, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-575, filed 2/10/82.]

WAC 173-303-578 Military munitions. (1) Applicability.

(a) The rules in this section identify when military munitions become a solid waste, and, if these wastes are also dangerous under this section or WAC 173-303-016 through 173-303-100, the management standards that apply to these wastes.

(b) Unless otherwise specified in this section, all applicable requirements in this chapter apply to waste military munitions.

(2) **Definition of solid waste.**

(a) A military munition is not a solid waste when:

(i) Used for its intended purpose, including:

(A) Use in training military personnel or explosives and munitions emergency response specialists (including training in proper destruction of unused propellant or other munitions); or

(B) Use in research, development, testing, and evaluation of military munitions, weapons, or weapon systems; or

(C) Recovery, collection, and on-range destruction of unexploded ordnance and munitions fragments during range clearance activities at active or inactive ranges. However, "use for intended purpose" does not include the on-range disposal or burial of unexploded ordnance and contaminants when the burial is not a result of product use.

(ii) An unused munition, or component thereof, is being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities, unless such activities involve use constituting disposal as defined in WAC 173-303-016 (5)(a), or burning for energy recovery as defined in WAC 173-303-016 (5)(b).

(b) An unused military munition is a solid waste when any of the following occurs:

(i) The munition is abandoned by being disposed of, burned, detonated (except during intended use as specified in (a) of this subsection), incinerated, or treated prior to disposal; or

(ii) The munition is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated prior to disposal; or

(iii) The munition is deteriorated or damaged (for example, the integrity of the munition is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or

(iv) The munition has been declared a solid waste by an authorized military official.

(c) A used or fired military munition is a solid waste:

(i) When transported off range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment prior to disposal; or

(ii) If recovered, collected, and then disposed of by burial, or landfilling either on or off a range.

(d) A used or fired military munition is a solid waste, and, therefore, is potentially subject to corrective action under WAC 173-303-646 or imminent and substantial endangerment authorities under WAC 173-303-960, if the munition lands off-range and is not promptly rendered safe and/or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is infeasible, the operator of the range must maintain a record of the event for as long as any threat remains. The

record must include the type of munition and its location (to the extent the location is known).

(e) Military munitions at closed or transferred ranges. Munitions discharged during military activities are discarded material (and therefore solid waste) for purposes of WAC 173-303-646 under the following circumstance:

The munition is left in place at the firing range at the time the range is closed or when the range is transferred from military control, whichever occurs first.

(3) **Standards applicable to emergency responses.**

Explosives and munitions emergencies involving military munitions or explosives are subject to WAC 173-303-170(5), 173-303-240 (6)(e), 173-303-400 (2)(c)(xii), 173-303-600 (3)(p), and 173-303-800 (7)(c), or alternatively to WAC 173-303-804.

(4) **Standards applicable to the storage of solid waste military munitions.**

(a) Criteria for dangerous waste regulation of waste nonchemical military munitions in storage.

(i) Waste military munitions in storage that exhibit a dangerous waste characteristic, criteria, or are listed as dangerous waste under WAC 173-303-070 are listed or identified as a dangerous waste (and thus are subject to regulation under this chapter), unless all the following conditions are met:

(A) The waste military munitions are not chemical agents or chemical munitions.

(B) The waste military munitions must be subject to the jurisdiction of the Department of Defense Explosives Safety Board (DDESB).

(C) The waste military munitions must be stored in accordance with the DDESB storage standards applicable to waste military munitions.

(D) Within ninety days of August 12, 1997, or within ninety days of when a storage unit is first used to store waste military munitions, whichever is later, the owner or operator must notify the department of the location of any waste storage unit used to store waste military munitions for which the conditional exemption in (a)(i) of this subsection is claimed.

(E) The owner or operator must provide oral notice to the department within twenty-four hours from the time the owner or operator becomes aware of any loss or theft of the waste military munitions, or any failure to meet a condition of (a)(i) of this subsection that may endanger health or the environment. In addition, a written submission describing the circumstances must be provided within five days from the time the owner or operator becomes aware of any loss or theft of the waste military munitions or any failure to meet a condition of (a)(i) of this subsection.

(F) The owner or operator must inventory the waste military munitions at least annually, must inspect the waste military munitions at least quarterly for compliance with the conditions of (a)(i) of this subsection, and must maintain records of the findings of these inventories and inspections for at least three years.

(G) Access to the stored waste military munitions must be limited to appropriately trained and authorized personnel.

(ii) The conditional exemption in (a)(i) of this subsection from regulation as dangerous waste applies only to the storage of nonchemical waste military munitions. It does not affect the regulatory status of waste military munitions as dangerous wastes with regard to transportation, treatment or disposal.

(iii) The conditional exemption in (a)(i) of this subsection applies only so long as all of the conditions in (a)(i) of this subsection are met.

(b) Notice of termination of waste storage. The owner or operator must notify the department when a storage unit identified in (a)(i)(D) of this subsection will no longer be used to store waste military munitions.

(c) Reinstatement of conditional exemption. If any waste military munition loses its conditional exemption under (a)(i) of this subsection, an application may be filed with the department for reinstatement of the conditional exemption from dangerous waste storage regulation with respect to such munition as soon as the munition is returned to compliance with the conditions of (a)(i) of this subsection. If the department finds that reinstatement of the conditional exemption is appropriate based on factors such as the owner's or operator's provision of a satisfactory explanation of the circumstances of the violation, or a demonstration that the violations are not likely to recur, the department may reinstate the conditional exemption under (a)(i) of this subsection. If the director does not take action on the reinstatement application within sixty days after receipt of the application, then reinstatement will be deemed granted, retroactive to the date of the application. However, the department may terminate a conditional exemption reinstated by default in the preceding sentence if it finds that reinstatement is inappropriate based on factors such as the owner's or operator's failure to provide a satisfactory explanation of the circumstances of the violation, or failure to demonstrate that the violations are not likely to recur. In reinstating the conditional exemption under (a)(i) of this subsection, the department may specify additional conditions as are necessary to ensure and document proper storage to protect human health and the environment.

(5) **Standards applicable to the treatment and disposal of waste military munitions.**

The treatment and disposal of dangerous waste military munitions are subject to the applicable permitting, procedural, and technical standards of this chapter.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-578, filed 5/10/00, effective 6/10/00.]

WAC 173-303-600 Final facility standards. Purpose, scope, and applicability.

(1) The purpose of WAC 173-303-600 through 173-303-695, is to establish minimum statewide standards which describe the acceptable management of dangerous waste. In addition to WAC 173-303-600 through 173-303-695, the final facility standards include WAC 173-303-280 through 173-303-395.

(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) The owner or operator of a POTW which treats, stores, or disposes of dangerous waste provided he has a permit by rule pursuant to the requirements 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 173-303-805, 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 has a permit by rule pursuant to the requirements of WAC 173-303-802(5);

(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 or, in the case of repackaging of previously containerized waste into new containers, at the time the waste is first placed into the new containers and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(l) The compaction or sorting of miscellaneous waste forms such as cans, rags, and bottles in a container, so long as the activity is solely for the purpose of reducing waste void space, and so long as these activities are conducted in a manner that protects human health and prevents any release to the environment and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(m) Generators treating dangerous waste on-site in tanks, containers, or containment buildings that are used for accumulation of such wastes provided the generator complies with the WAC 173-303-170(3);

(n) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in WAC 173-303-040, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in 40 CFR section 268.40, Table Treatment Standards for Hazardous Wastes), or reactive (D003) waste, to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in WAC 173-303-395 (1)(a);

(o) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) handling the wastes listed below. These handlers are subject to regulation under WAC 173-303-573, when handling the below listed universal wastes.

(i) Batteries as described in WAC 173-303-573(2);

(ii) Thermostats as described in WAC 173-303-573(3); and

(iii) Lamps as described in WAC 173-303-573(5);

(p)(i) Except as provided in (p)(ii) of this subsection, a person engaged in treatment or containment activities during immediate response to any of the following situations:

(A) A discharge of a dangerous waste;

(B) An imminent and substantial threat of a discharge of dangerous waste;

(C) A discharge of a material that, when discharged, becomes a dangerous waste;

(D) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in WAC 173-303-040.

(ii) An owner or operator of a facility otherwise regulated by WAC 173-303-600 must comply with all applicable requirements of WAC 173-303-340 and 173-303-350.

(iii) Any person who is covered by (p)(i) of this subsection and who continues or initiates dangerous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(iv) In the case of an explosives or munitions emergency response, if a federal, state, tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA/state identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition;

(q) WAC 173-303-578 identifies when the requirements of WAC 173-303-600 apply to the storage of military munitions classified as solid waste under WAC 173-303-578(2). The treatment and disposal of dangerous waste military munitions are subject to the applicable permitting, procedural, and technical standards in this chapter.

(4) Reserve.

(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.

(7) The final facility requirements apply to owners or operators of all facilities that treat, store, or dispose of hazardous wastes referred to in 40 CFR Part 268, which is incorporated by reference at WAC 173-303-140(2).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-600, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-600, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-600, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-600, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-600, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-600, filed 9/6/88; 88-07-039 (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 post-closure. (1) Applicability.

(a) Subsections (2) through (6) of this section, (which concern closure), apply to the owners and operators of all dangerous waste facilities.

(b) Subsections (7) through (11) of this section, (which concern post-closure care), apply to the owners and operators of all regulated units (as defined in WAC 173-303-040) at which dangerous waste will remain after closure, to tank systems that are required under WAC 173-303-640(8) to meet the requirements of landfills, to surface impoundments, waste piles, and miscellaneous units as specified in WAC 173-303-650(6), 173-303-660(9), and 173-303-680(4), respectively; to containment buildings that are required under 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695) to meet the requirements for landfills; 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 post-closure requirements, any portion of a facility which closes is subject to the applicable closure and post-closure standards even if the rest of the facility does not close and continues to operate.

(d) Except for subsection (2)(a) of this section, the director may, in an enforceable document, replace all or part of the requirements of this section and the unit-specific requirements referenced in subsection (2)(b) of this section with alternative requirements when he or she determines:

(i) A dangerous waste unit is situated among other solid waste management units or areas of concern, a release has occurred, and both the dangerous waste unit and one or more of the solid waste management units or areas of concern are likely to have contributed to the release; and

(ii) It is not necessary to apply the requirements of this section (or the unit-specific requirements referenced in subsection (2)(b) of this section) because the alternative requirements will protect human health and the environment.

(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, post-closure 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(8), 173-303-650(6), 173-303-655(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680 (2) through (4), or 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695) 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 residue, then such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed:

(i) For soils, ground water, surface water, and air, the numeric cleanup levels calculated using residential exposure assumptions according to the Model Toxics Control Act Regulations, chapter 173-340 WAC as now or hereafter amended. Primarily, these will be numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate, see WAC 173-340-700 through 173-340-760, excluding WAC 173-340-745; and

(ii) For all structures, equipment, bases, liners, etc., clean closure standards will be set by the department on a case-by-case basis in accordance with the closure performance standards of WAC 173-303-610 (2)(a)(ii) and in a manner that minimizes or eliminates post-closure escape of dangerous waste constituents.

(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(8), 173-303-645, 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680(2), and 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695). A copy of the approved plan and all revisions to the plan must be furnished to the depart-

ment 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 Class 1 modification with prior approval 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, treating, 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;

(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.); and

(viii) 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.

(ix) For facilities where the director has applied alternative requirements under subsection (1)(d) of this section, WAC 173-303-645 (1)(e), or 173-303-620 (8)(d), the closure plan must include either the alternative requirements or a reference to the enforceable document that contains the alternative requirements.

(b) The owner or operator must submit a written notification of or request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the applicable procedures in WAC 173-303-800 through 173-303-840. The written notification or request must include a copy of the amended closure plan for review or approval by the department.

(i) The owner or operator may submit a written notification or 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 notification of or 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; or

(D) The owner/operator requests the director apply alternative requirements under subsection (1)(d) of this section, WAC 173-303-645 (1)(e), or 173-303-620 (8)(d).

(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:

(A) 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; or

(B) For units meeting the requirements of subsection (4)(d) of this section, no later than thirty days after the date on which the dangerous waste management unit receives the known final volume of nondangerous wastes, or if there is a reasonable possibility that the dangerous waste management unit will receive additional nondangerous wastes, no later than one year after the date on which the unit received the most recent volume of nondangerous wastes. If the owner or operator can demonstrate to the department that the dangerous waste management unit has the capacity to receive additional nondangerous 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 will 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, or the final volume of nondangerous wastes if the owner or operator complies with all applicable requirements in (d) and (e) of this subsection, 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, or has the capacity to receive nondangerous wastes if the owner or operator complies with (d) and (e) of this subsection;

(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, or the final volume of nondangerous wastes if the owner or operator complies with all applicable requirements in (d) and (e) of this subsection, 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 or facility, including compliance with all applicable permit requirements, and either:

(i) The partial or final closure activities will, of necessity, take longer than one hundred eighty days to complete; or

(ii)(A) The dangerous waste management unit or facility has the capacity to receive additional dangerous wastes, or has the capacity to receive nondangerous wastes if the owner or operator complies with (d) and (e) of this subsection;

(B) There is 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.

(c) The demonstrations referred to in (a)(i) and (b)(i) of this subsection must be made as follows: The demonstrations in (a)(i) of this subsection must be made at least thirty days prior to the expiration of the specified ninety-day period; and the demonstration in (b)(i) of this subsection must be made at least thirty days prior to the expiration of the specified one hundred eighty-day period unless the owner or operator is otherwise subject to the deadlines in (d) of this subsection.

(d) The department may allow an owner or operator to receive only nondangerous wastes in a landfill, land treatment, or surface impoundment unit after the final receipt of dangerous wastes at that unit if:

(i) The owner or operator requests a permit modification in compliance with all applicable requirements in WAC 173-303-830 and 40 CFR Part 124 and in the permit modification request demonstrates that:

(A) The unit has the existing design capacity as indicated on the part A application to receive nondangerous wastes; and

(B) There is a reasonable likelihood that the owner or operator or another person will receive nondangerous wastes in the unit within one year after the final receipt of dangerous wastes; and

(C) The nondangerous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under this part; and

(D) Closure of the dangerous waste management unit would be incompatible with continued operation of the unit or facility; and

(E) The owner or operator is operating and will continue to operate in compliance with all applicable permit requirements; and

(ii) The request to modify the permit includes an amended wastes analysis plan, ground water monitoring and response program, human exposure assessment required under RCRA section 3019, and closure and post-closure plan, and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate, to reflect any changes due to the presence of dangerous constituents in the nondangerous wastes, and changes in closure activities, including the expected year of closure if applicable under subsection (3)(a)(viii) of this section, as a result of the receipt of nondangerous wastes following the final receipt of dangerous wastes; and

(iii) The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of nondangerous wastes following receipt of the final volume of dangerous wastes; and

(iv) The request to modify the permit and the demonstration referred to in (d)(i) and (ii) of this subsection are submitted to the department no later than one hundred twenty days prior to the date on which the owner or operator of the facility receives the known final volume of dangerous wastes at the unit, or no later than ninety days after the effective date of this rule in the state in which the unit is located, whichever is later.

(e) In addition to the requirements in (d) of this subsection, an owner or operator of a dangerous wastes surface impoundment that is not in compliance with the liner and leachate collection system requirements in 42 U.S.C. 3004 (o)(1) and 3005 (j)(1) or 42 U.S.C. 3004 (o)(2) or (3) or 3005 (j)(2), (3), (4) or (13) must:

(i) Submit with the request to modify the permit:

(A) A contingent corrective measures plan, unless a corrective action plan has already been submitted under WAC 173-303-645(10); and

(B) A plan for removing dangerous wastes in compliance with (e)(ii) of this subsection; and

(ii) Remove all dangerous wastes from the unit by removing all dangerous liquids, and removing all dangerous sludges to the extent practicable without impairing the integrity of the liner(s), if any.

(iii) Removal of dangerous wastes must be completed no later than ninety days after the final receipt of dangerous wastes. The department may approve an extension to this deadline if the owner or operator demonstrates that the removal of dangerous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.

(iv) If a release that is a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters of constituents specified in the permit or that exceeds the facility's ground water protection standard at the point of compliance, if applicable, is detected in accordance with the requirements in WAC 173-303-645, the owner or operator of the unit:

(A) Must implement corrective measures in accordance with the approved contingent corrective measures plan required by (e)(i) of this subsection no later than one year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;

(B) May continue to receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and

(C) May be required by the department to implement corrective measures in less than one year or to cease the receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.

(v) During the period of corrective action, the owner or operator must provide semiannual reports to the department that describe the progress of the corrective action program, compile all ground water monitoring data, and evaluate the effect of the continued receipt of nondangerous wastes on the effectiveness of the corrective action.

(vi) The department may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one year as required in (e)(iv) of this subsection, or fails to make substantial progress in implementing corrective action and achieving the facility's ground water protection standard or background levels if the facility has not yet established a ground water protection standard.

(vii) If the owner or operator fails to implement corrective measures as required in (e)(iv) of this subsection or if the department determines that substantial progress has not been made pursuant to (e)(vi) of this subsection the department will:

(A) Notify the owner or operator in writing that the owner or operator must begin closure in accordance with the deadline in (a) and (b) of this subsection and provide a detailed statement of reasons for this determination; and

(B) Provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than twenty days after the date of the notice.

(C) If the department receives no written comments, the decision will become final five days after the close of the comment period. The department will notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, must be submitted within fifteen days of the final notice and that closure must begin in accordance with the deadlines in (a) and (b) of this subsection.

(D) If the department receives written comments on the decision, it will make a final decision within thirty days after

the end of the comment period, and provide the owner or operator in writing and the public through a newspaper notice, a detailed statement of reasons for the final decision. If the department determines that substantial progress has not been made, closure must be initiated in accordance with the deadlines in (a) and (b) of this subsection.

(E) The final determinations made by the department under (e)(vii)(C) and (D) of this subsection are not subject to administrative appeal.

(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 173-303-640(8), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), or under the authority of WAC 173-303-680 (2) and (4). 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 management unit (including tank systems and container storage areas), 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) Post-closure care and use of property.

(a) Post-closure care for each dangerous waste management unit subject to post-closure 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 required by WAC 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680; 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 post-closure care requirements or final closure, or any time during the post-closure 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 post-closure 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

(ii) Extend the post-closure 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 post-closure 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) Post-closure 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 post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in subsection (8) of this section.

(8) Post-closure plan; amendment of plan.

(a) The owner or operator of a dangerous waste disposal unit must have a written post-closure plan. In addition, certain surface impoundments and certain piles 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 post-closure plans. Owners or operators of surface impoundments and waste piles not otherwise required to prepare contingent post-closure plans under WAC 173-303-650 or 173-303-660 must submit a post-closure plan to the department within ninety 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 post-closure 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 post-closure plan will become a condition of any permit issued.

(b) For each dangerous waste management unit subject to the requirements of this subsection, the post-closure 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 comply with WAC 173-303-645, 173-303-650, 173-303-655, 173-

303-660, 173-303-665, and 173-303-680 during the post-closure care period, to ensure:

(A) The integrity of the cap and final cover or other containment structures in accordance with the requirements of 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680; and

(B) The function of the facility monitoring equipment;

(iii) The name, address, and phone number of the person or office to contact about the dangerous waste disposal unit or facility during the post-closure care period;

(iv) And, for facilities where the director has applied alternative requirements under subsection (1)(d) of this section, WAC 173-303-645 (1)(e) or 173-303-620 (8)(d), the post-closure plan must include either the alternative requirements or a reference to the enforceable document that contains the alternative requirements.

(c) Until final closure of the facility, a copy of the approved post-closure plan must be furnished to the department upon request, including request by mail. After final closure has been certified, the person or office specified in (b)(iii) of this subsection must keep the approved post-closure plan during the remainder of the post-closure period.

(d) Amendment of plan. The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements of WAC 173-303-800 through 173-303-840. The written notification or request must include a copy of the amended post-closure plan for review or approval by the department.

(i) The owner or operator may submit a written notification or request to the department for a permit modification to amend the post-closure plan at any time during the active life of the facility or during the post-closure care period.

(ii) The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan whenever:

(A) Changes in operating plans or facility design affect the approved post-closure 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 post-closure plan; or

(D) The owner/operator requests the director apply alternative requirements under subsection (1)(d) of this section, WAC 173-303-645 (1)(e), or 173-303-620 (8)(d).

(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 post-closure 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 post-closure plan under WAC 173-303-650 or 173-303-660 must submit a post-closure 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 post-closure 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 post-closure 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) 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 post-closure 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 post-closure care. No later than sixty days after completion of the established post-closure care period for each dangerous waste disposal unit, the owner or operator must submit to the department, by registered mail, a certification that the post-closure care period for the dangerous waste disposal unit was performed in accordance with the specifications in the approved post-closure 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 post-closure care under WAC 173-303-620(6).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-610, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-610, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-610, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-610, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-610, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-610, filed 1/4/89; 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.]

WAC 173-303-620 Financial requirements. (1) Applicability.

(a) The requirements of subsections (3), (4), (7), (8), (9), and (10) of this section, apply to owners and operators of all dangerous waste facilities, except as provided otherwise in this section.

(b) The requirements of subsections (5) and (6) of this section apply to owners and operators of:

(i) Dangerous waste disposal facilities;

(ii) Tank systems that are required under WAC 173-303-640(8) to meet the requirements of landfills;

(iii) Miscellaneous units as specified in WAC 173-303-680(4);

(iv) Waste piles and surface impoundments to the extent that WAC 173-303-650 and 173-303-660, respectively, require that such facilities comply with this section; and

(v) Containment buildings that are required under WAC 173-303-695 to meet the requirements for landfills.

(c) States and the federal government are exempt from the requirements of this section. Operators of state or federally owned facilities are exempt from the requirements of this section, except subsections (3) and (5) of this section. Operators of facilities who are under contract with (but not owned by) the state or federal government must meet all of the requirements of this section.

(d) The director may, in an enforceable document, replace all or part of the requirements of this section with alternative requirements for financial assurance when he or she:

(i) Applies alternative requirements for ground water monitoring, closure or post-closure under WAC 173-303-610 (1)(d) or 173-303-645 (1)(e); and

(ii) Determines that it is not necessary to apply the requirements of this section because the alternative requirements will protect human health and the environment.

(2) Definitions. As used in this section, the following listed or referenced terms 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 post-closure 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) "Post-closure plan" means the plan for post-closure 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), (g), and (h) are incorporated by reference.

(3) Cost estimate for facility closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in WAC 173-303-610 (2) through (6), and applicable closure requirements in 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), 173-303-670(8), 173-303-680 (2) through (4) and 173-303-695. The closure cost estimate:

(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, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), 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, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), 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 (c)(i) and (ii) of this subsection.

(c) 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 or Gross Domestic 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 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 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 must meet all the requirements set forth in 40 CFR 264.143 which are incorporated by reference. If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state.

(5) Cost estimate for post-closure monitoring and maintenance.

(a) The owner or operator of a facility subject to post-closure monitoring or maintenance requirements must have a detailed written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in WAC 173-303-610 (7) through (10), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), and 173-303-680(4). The post-closure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct post-closure 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 post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required by WAC 173-303-610.

(b) During the active life of the facility, the owner or operator must revise the post-closure cost estimate within thirty days after the department has approved the request to modify the post-closure plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure 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 post-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 subsection (6) of this section. For owners or operators using the financial test or corporate guarantee, the post-closure 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 post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent *Implicit Price Deflator for Gross National Product* or *Gross Domestic 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 post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted post-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 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, the latest adjusted post-closure cost estimate.

(6) Financial assurance for post-closure monitoring and maintenance.

(a) An owner or operator of a facility subject to post-closure monitoring or maintenance requirements must establish financial assurance for post-closure care in accordance with the approved post-closure care plan. He must choose from the following options or combination of options:

(i) Post-closure trust fund;

(ii) Surety bond guaranteeing payment into a post-closure trust fund;

(iii) Surety bond guaranteeing performance of post-closure care;

(iv) Post-closure letter of credit;

(v) Post-closure insurance; or

(vi) Financial test and corporate guarantee for post-closure care.

(b) In satisfying the requirements of financial assurance for facility post-closure care in this subsection, the owner or operator must meet all the requirements set forth in 40 CFR 264.145 which are incorporated by reference. If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state.

(7) Use of a mechanism for financial assurance of both closure and post-closure care. An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure 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 which are incorporated by reference. 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 post-closure 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) which is incorporated by reference.

(b) An owner or operator of a facility with a regulated unit or units (as defined in WAC 173-303-040) or a disposal miscellaneous unit or units 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), 264.177 (f), (g), (h), (i), and (j) which are incorporated by reference.

(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 nonsudden accidental occurrences resulting from the operations of a facility that has no regulated units (as defined in WAC 173-303-040), 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 facil-

ity, as specified in WAC 173-303-610(6), are received by the department.

(f) The following subsections are incorporated by reference: 40 CFR section 260.147(f), Financial test for liability coverage, (g) Guarantee for liability coverage, (h) Letter of credit for liability coverage, (i) Surety bond for liability coverage, and (j) Trust fund for liability coverage.

(9) 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 must contain the wording specified by 40 CFR 264.151 which is incorporated by reference, except that:

(a) The words "regional administrator" and "environmental protection agency" must be replaced with the words Washington state department of ecology;

(b) The words "hazardous waste" must be replaced with the words "dangerous waste";

(c) Any other words specified by the department must be changed as necessary to assure financial responsibility of the facility in accordance with the requirements of this section; and

(d) Whenever 40 CFR 264.151 requires that owners and operators notify several regional administrators of their financial obligations, the owner or operator must notify both the department and all regional administrators of regions that are affected by the owner or operator's financial assurance mechanisms.

Copies of the financial instruments with the appropriate word changes will be available from the department by June 30, 1984.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-620, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-620, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-620, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-620, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-620, filed 1/4/89; 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 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-620, filed 2/10/82. Formerly WAC 173-302-340.]

WAC 173-303-630 Use and management of containers. (1) Applicability. The regulations in this section apply to owners and operators of all dangerous waste facilities that store containers of dangerous waste.

(2) Condition of containers. If a container holding dangerous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the dangerous waste from the container to a container that is in good condition or manage the waste in some other way that complies with the requirements of chapter 173-303 WAC. In addition, the owner or operator must address leaks and spills in accordance with the applicable provisions of WAC 173-303-145 and 173-303-360.

(3) Identification of containers. The owner or operator must label containers in a manner which adequately identifies the major risk(s) associated with the contents of the containers for employees, emergency response personnel and the public (Note—If there is already a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate). The owner or operator must affix labels upon transfer of dangerous wastes from one container to another. The owner or operator must destroy or otherwise remove labels from the emptied container, unless the container will continue to be used for storing dangerous waste at the facility. The owner or operator must ensure that labels are not obscured, removed, or otherwise unreadable in the course of inspection required under WAC 173-303-320.

(4) Compatibility of waste with containers. The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the dangerous waste to be stored, so that the ability of the container to contain the waste is not impaired.

(5) Management of containers.

(a) A container holding dangerous waste must always be closed, except when it is necessary to add or remove waste.

(b) A container holding dangerous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

(c) A minimum thirty-inch separation is required between aisles of containers holding dangerous waste(s). A row of drums must be no more than two drums wide.

(6) Inspections. At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion, deterioration, or other factors. The owner or operator must keep an inspection log including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made and the date and nature of any repairs or remedial actions taken. The log must be kept at the facility for at least five years from the date of inspection.

(7) Containment.

(a) Container storage areas must have a containment system that is capable of collecting and holding spills and leaks. In addition to the necessary leak containment capacity, uncovered storage areas must be capable of holding the addi-

tional volume that would result from the precipitation of a maximum twenty-five year storm of twenty-four hours duration. The containment system must:

(i) Have a base underlying the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated rainfall until the collected material is detected and removed. The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

(ii) Be designed for positive drainage control (such as a locked drainage valve) to prevent release of contaminated liquids and so that uncontaminated precipitation can be drained promptly for convenience of operation. Spilled or leaked waste and accumulated precipitation must be removed from the containment system in as timely a manner as is necessary to prevent overflow; and

(iii) Have sufficient capacity to contain ten percent of the volume of all containers or the volume of the largest container, whichever is greater. Only containers holding free liquids, or holding wastes designated as F020, F021, F022, F023, F026, or F027 need to be considered in this determination.

(b) Run-on into the containment system must be prevented, unless the department waives this requirement in the permit after determining that the collection system has sufficient excess capacity in addition to that required in (a)(iii) of this subsection to accommodate any run-on which might enter the system.

(c) Storage areas that store containers holding only wastes that do not contain free liquids, do not exhibit either the characteristic of ignitability or reactivity as described in WAC 173-303-090 (5) or (7), and are not designated as F020, F021, F022, F023, F026, or F027, need not have a containment system as described in this subsection: Provided, That:

(i) The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation; or

(ii) The containers are elevated or are otherwise protected from contact with accumulated liquids.

(d) The department may require generators to protect their containers from the elements by means of a building or other protective covering if the department determines that such protection is necessary to prevent a release of waste or waste constituents due to the nature of the waste or design of the container. The building or other protective covering must allow adequate inspection under subsection (6) of this section.

(8) Special requirements for ignitable or reactive waste.

(a) Containers holding reactive waste exhibiting a characteristic specified in WAC 173-303-090 (7)(a)(vi), (vii) or (viii) must be stored in a manner equivalent to the Uniform Fire Code's *"American Table of Distances for Storage of Explosives,"* Table 77-201, 1997 edition or the version adopted by the local fire district.

(b) The owner or operator must design, operate, and maintain ignitable waste and reactive waste (other than a reactive waste which must meet (a) of this subsection) container storage in a manner equivalent with the Uniform Fire Code. Where no specific standard or requirements are specified in the Uniform Fire Code, or in existing state or local fire codes, applicable sections of the NFPA Pamphlet #30, *"Flammable and Combustible Liquids Code,"* must be used. The owner/operator must also comply with the requirements of WAC 173-303-395 (1)(d).

(9) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials must not be placed in the same container, unless WAC 173-303-395 (1)(b) is complied with.

(b) Dangerous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

(c) A storage container holding a dangerous waste that is incompatible with any waste or other materials 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. Containment systems for incompatible wastes must be separate.

(10) Closure. At closure, all dangerous waste and dangerous waste residues must be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with dangerous waste or dangerous waste residues must be decontaminated or removed.

(11) Air emission standards. The owner or operator must manage all hazardous waste placed in a container in accordance with the applicable requirements of 40 CFR Subparts AA, BB, and CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-630, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-630, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-630, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-630, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-630, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-630, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-630, filed 2/10/82.]

WAC 173-303-640 Tank systems. (1) Applicability.

(a) The regulations in WAC 173-303-640 apply to owners and operators of facilities that use tank systems to treat or store dangerous waste, except as (b), (c), and (d) of this subsection provides otherwise.

(b) Tank systems that are used to store or treat dangerous waste which contain no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in subsection (4) of this section. To demonstrate the absence or presence of free liquids in the stored/treated waste, the test method described in WAC 173-303-110 (3)(a) must be used.

(c) Tank systems, including sumps, as defined in WAC 173-303-040, that serve as part of a secondary containment system to collect or contain releases of dangerous wastes are exempted from the requirements in subsection (4)(a) of this section.

(d) Tanks, sumps, and other such collection devices or systems used in conjunction with drip pads, as defined in

WAC 173-303-040 and regulated under WAC 173-303-675, must meet the requirements of this section.

(2) Assessment of existing tank system's integrity.

(a) For each existing tank system, the owner or operator must determine that the tank system is not leaking or is unfit for use. Except as provided in (b) of this subsection, the owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified registered professional engineer, in accordance with WAC 173-303-810 (13)(a), that attests to the tank system's integrity by January 12, 1988, for underground tanks that do not meet the requirements of subsection (4) of this section and that cannot be entered for inspection, or by January 12, 1990, for all other tank systems.

(b) Tank systems that store or treat materials that become dangerous wastes subsequent to January 12, 1989, must conduct this assessment within twelve months after the date that the waste becomes a dangerous waste.

(c) This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

(i) Design standard(s), if available, according to which the tank system was constructed;

(ii) Dangerous characteristics of the waste(s) that have been and will be handled;

(iii) Existing corrosion protection measures;

(iv) Documented age of the tank system, if available (otherwise, an estimate of the age); and

(v) Results of a leak test, internal inspection, or other tank system integrity examination such that:

(A) For nonenterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects; and

(B) For other than nonenterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination, that is certified by an independent, qualified, registered professional engineer, in accordance with WAC 173-303-810 (13)(a), that addresses cracks, leaks, corrosion, and erosion.

Note: The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines in conducting other than a leak test.

(d) If, as a result of the assessment conducted in accordance with (a) of this subsection, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of subsection (7) of this section.

(e) The owner or operator must develop a schedule for conducting integrity assessments over the life of the tank to ensure that the tank retains its structural integrity and will not collapse, rupture, or fail. The schedule must be based on the results of past integrity assessments, age of the tank system, materials of construction, characteristics of the waste, and any other relevant factors.

(3) Design and installation of new tank systems or components.

(a) Owners or operators of new tank systems or components must obtain (and for facilities that are pursuing or have obtained a final status permit, submit to the department, at time of submittal of Part B information) a written assessment, reviewed and certified by an independent, qualified registered professional engineer, in accordance with WAC 173-303-810 (13)(a), attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of dangerous waste. The assessment must show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection to ensure that it will not collapse, rupture, or fail. This assessment (which will be used by the department to review and approve or disapprove the acceptability of the tank system design at facilities which are pursuing or have obtained a final status permit) must include, at a minimum, the following information:

(i) Design standard(s) according to which tank system(s) are constructed;

(ii) Dangerous characteristics of the waste(s) to be handled;

(iii) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of:

(A) Factors affecting the potential for corrosion, including but not limited to:

(I) Soil moisture content;

(II) Soil pH;

(III) Soil sulfides level;

(IV) Soil resistivity;

(V) Structure to soil potential;

(VI) Influence of nearby underground metal structures (e.g., piping);

(VII) Existence of stray electric current;

(VIII) Existing corrosion-protection measures (e.g., coating, cathodic protection); and

(B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:

(I) Corrosion-resistant materials of construction such as special alloys, fiberglass reinforced plastic, etc.;

(II) Corrosion-resistant coating (such as epoxy, fiberglass, etc.,) with cathodic protection (e.g., impressed current or sacrificial anodes); and

(III) Electrical isolation devices such as insulating joints, flanges, etc.

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

(iv) For underground tank system components that are likely to be adversely affected by vehicular traffic, a determi-

nation of design or operational measures that will protect the tank system against potential damage; and

(v) Design considerations to ensure that:

(A) Tank foundations will maintain the load of a full tank;

(B) Tank systems will be anchored to prevent flotation or dislodgment where the tank system is either placed in a saturated zone, or is located less than five hundred feet from a fault which has had displacement in Holocene times; and

(C) Tank systems will withstand the effects of frost heave.

(b) The owner or operator must develop a schedule for conducting integrity assessments over the life of the tank to ensure that the tank retains its structural integrity and will not collapse, rupture or fail. The schedule must be based on the results of past integrity assessments, age of the tank system, materials of construction, characteristics of the waste, and any other relevant factors.

(c) The owner or operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified installation inspector or an independent, qualified, registered professional engineer, either of whom is trained and experienced in the proper installation of tank systems or components, must inspect the system for the presence of any of the following items:

(i) Weld breaks;

(ii) Punctures;

(iii) Scrapes of protective coatings;

(iv) Cracks;

(v) Corrosion;

(vi) Other structural damage or inadequate construction/installation.

All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.

(d) New tank systems or components that are placed underground and that are backfilled must be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

(e) All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed, or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system must be performed prior to the tank system being covered, enclosed, or placed into use.

(f) Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

Note: The piping system installation procedures described in American Petroleum Institute (API) Publication 1615 (November 1979), "Installation of Underground Petroleum Storage Systems," or ANSI Standard B31.3, "Petroleum Refinery Piping," and ANSI Standard B31.4 "Liquid Petroleum Transportation Piping System," may be used, where applicable, as guidelines for proper installation of piping systems.

(g) The owner or operator must provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under (a)(iii) of this subsection, or other corrosion protection if the department believes other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.

(h) The owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of (b) through (g) of this subsection, that attest that the tank system was properly designed and installed and that repairs, pursuant to (c) and (e) of this subsection, were performed. These written statements must also include the certification statement as required in WAC 173-303-810 (13)(a).

(4) Containment and detection of releases.

(a) In order to prevent the release of dangerous waste or dangerous constituents to the environment, secondary containment that meets the requirements of this subsection must be provided (except as provided in (f) and (g) of this subsection):

(i) For all new tank systems or components, prior to their being put into service;

(ii) For all existing tank systems used to store or treat Dangerous Waste Nos. F020, F021, F022, F023, F026, and F027, within two years after January 12, 1989;

(iii) For those existing tank systems of known and documented age, within two years after January 12, 1989, or when the tank system has reached fifteen years of age, whichever comes later;

(iv) For those existing tank systems for which the age cannot be documented, within eight years of January 12, 1989; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches fifteen years of age, or within two years of January 12, 1989, whichever comes later; and

(v) For tank systems that store or treat materials that become dangerous wastes subsequent to January 12, 1989, within the time intervals required in (a)(i) through (iv) of this subsection, except that the date that a material becomes a dangerous waste must be used in place of January 12, 1989.

(b) Secondary containment systems must be:

(i) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and

(ii) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(c) To meet the requirements of (b) of this subsection, secondary containment systems must be at a minimum:

(i) Constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operations (including stresses from nearby vehicular traffic);

(ii) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(iii) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of dangerous waste or accumulated liquid in the secondary containment system within twenty-four hours, or at the earliest practicable time if the owner or operator can demonstrate to the department that existing detection technologies or site conditions will not allow detection of a release within twenty-four hours; and

(iv) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within twenty-four hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the department that removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four hours.

Note: If the collected material is a dangerous waste under WAC 173-303-070, it is subject to management as a dangerous waste in accordance with all applicable requirements of WAC 173-303-170 through 173-303-400 and WAC 173-303-600 through 173-303-695. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water Act, as amended. If discharged to a publicly owned treatment works (POTW), it is subject to the requirements of section 307 of the Clean Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR Part 302.

(d) Secondary containment for tanks must include one or more of the following devices:

(i) A liner (external to the tank);

(ii) A vault;

(iii) A double-walled tank; or

(iv) An equivalent device as approved by the department.

(e) In addition to the requirements of (b), (c), and (d) of this subsection, secondary containment systems must satisfy the following requirements:

(i) External liner systems must be:

(A) Designed or operated to contain one hundred percent of the capacity of the largest tank within its boundary;

(B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a twenty-five-year, twenty-four-hour rainfall event.

(C) Free of cracks or gaps; and

(D) Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste).

(ii) Vault systems must be:

(A) Designed or operated to contain one hundred percent of the capacity of the largest tank within its boundary;

(B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a twenty-five-year, twenty-four-hour rainfall event;

(C) Constructed with chemical-resistant water stops in place at all joints (if any);

(D) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;

(E) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:

(I) Meets the definition of ignitable waste under WAC 173-303-090(5); or

(II) Meets the definition of reactive waste under WAC 173-303-090(7), and may form an ignitable or explosive vapor.

(F) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(iii) Double-walled tanks must be:

(A) Designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

(B) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(C) Provided with a built-in continuous leak detection system capable of detecting a release within twenty-four hours, or at the earliest practicable time, if the owner or operator can demonstrate to the department, and the department concludes, that the existing detection technology or site conditions would not allow detection of a release within twenty-four hours.

Note: The provisions outlined in the Steel Tank Institute's (STI) "Standard for Dual Wall Underground Steel Storage Tanks" may be used as guidelines for aspects of the design of underground steel double-walled tanks.

(f) Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of (b) and (c) of this subsection except for:

(i) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

(ii) Welded flanges, welded joints, and welded connections, that are visually inspected for leaks on a daily basis;

(iii) Sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and

(iv) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

(g) The owner or operator may obtain a variance from the requirements of this subsection if the department finds, as

a result of a demonstration by the owner or operator that alternative design and operating practices, together with location characteristics, will prevent the migration of any dangerous waste or dangerous constituents into the ground water, or surface water at least as effectively as secondary containment during the active life of the tank system or that in the event of a release that does migrate to ground water or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with (g)(ii) of this subsection, be exempted from the secondary containment requirements of this section.

(i) In deciding whether to grant a variance based on a demonstration of equivalent protection of ground water and surface water, the department will consider:

(A) The nature and quantity of the wastes;

(B) The proposed alternate design and operation;

(C) The hydrogeologic setting of the facility, including the thickness of soils present between the tank system and ground water; and

(D) All other factors that would influence the quality and mobility of the dangerous constituents and the potential for them to migrate to ground water or surface water.

(ii) In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the department will consider:

(A) The potential adverse effects on ground water, surface water, and land quality taking into account:

(I) The physical and chemical characteristics of the waste in the tank system, including its potential for migration;

(II) The hydrogeological characteristics of the facility and surrounding land;

(III) The potential for health risks caused by human exposure to waste constituents;

(IV) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(V) The persistence and permanence of the potential adverse effects.

(B) The potential adverse effects of a release on ground water quality, taking into account:

(I) The quantity and quality of ground water and the direction of ground water flow;

(II) The proximity and withdrawal rates of ground water users;

(III) The current and future uses of ground water in the area; and

(IV) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality.

(C) The potential adverse effects of a release on surface water quality, taking into account:

(I) The quantity and quality of ground water and the direction of ground water flow;

(II) The patterns of rainfall in the region;

(III) The proximity of the tank system to surface waters;

(IV) The current and future uses of surface waters in the area and any water quality standards established for those surface waters; and

(V) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality.

(D) The potential adverse effects of a release on the land surrounding the tank system, taking into account:

(I) The patterns of rainfall in the region; and

(II) The current and future uses of the surrounding land.

(iii) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of (g)(i) of this subsection, at which a release of dangerous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), must:

(A) Comply with the requirements of subsection (7) of this section, except subsection (7)(d) of this section; and

(B) Decontaminate or remove contaminated soil to the extent necessary to:

(I) Enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and

(II) Prevent the migration of dangerous waste or dangerous constituents to ground water or surface water.

(C) If contaminated soil cannot be removed or decontaminated in accordance with (g)(iii)(B) of this subsection, comply with the requirements of subsection (8) of this section.

(iv) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of (g)(i) of this subsection, at which a release of dangerous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), must:

(A) Comply with the requirements of subsection (7)(a), (b), (c), and (d) of this section; and

(B) Prevent the migration of dangerous waste or dangerous constituents to ground water or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if ground water has been contaminated, the owner or operator must comply with the requirements of subsection (8)(b) of this section; and

(C) If repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with the requirements of (a) through (f) of this subsection or reapply for a variance from secondary containment and meet the requirements for new tank systems in subsection (3) of this section if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil can be decontaminated or removed and ground water or surface water has not been contaminated.

(h) The following procedures must be followed in order to request a variance from secondary containment:

(i) The department must be notified in writing by the owner or operator that he intends to conduct and submit a demonstration for a variance from secondary containment as allowed in (g) of this subsection according to the following schedule:

(A) For existing tank systems, at least twenty-four months prior to the date that secondary containment must be provided in accordance with (a) of this subsection.

(B) For new tank systems, at least thirty days prior to entering into a contract for installation.

(ii) As part of the notification, the owner or operator must also submit to the department a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in (g)(i) or (ii) of this subsection;

(iii) The demonstration for a variance must be completed within one hundred eighty days after notifying the department of an intent to conduct the demonstration; and

(iv) If a variance is granted under this subsection, the department will require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

(i) All tank systems, until such time as secondary containment that meets the requirements of this section is provided, must comply with the following:

(A) For nonenterable underground tanks, a leak test that meets the requirements of subsection (2)(c)(v) of this section or other tank integrity method, as approved or required by the department, must be conducted at least annually.

(B) For other than nonenterable underground tanks, the owner or operator must either conduct a leak test as in (i)(A) of this subsection or develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, qualified registered professional engineer. The schedule and procedure must be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments must be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection, and the characteristics of the waste being stored or treated.

(C) For ancillary equipment, a leak test or other integrity assessment as approved by the department must be conducted at least annually.

Note: The practices described in the American Petroleum Institute (API) Publication Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines for assessing the overall condition of the tank system.

(D) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with (h)(iv)(A) through (C) of this subsection.

(E) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in (h)(iv)(A) through (C) of this subsection, the owner or operator must comply with the requirements of subsection (7) of this section.

(5) General operating requirements.

(a) Dangerous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

(b) The owner or operator must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:

(i) Spill prevention controls (e.g., check valves, dry disconnect couplings);

(ii) Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

(iii) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

(c) The owner or operator must comply with the requirements of subsection (7) of this section if a leak or spill occurs in the tank system.

(d) All tank systems holding dangerous waste must be marked with labels or signs to identify the waste contained in the tank. The label or sign must be legible at a distance of at least fifty feet, and must bear a legend which identifies the waste in a manner which adequately warns employees, emergency response personnel, and the public of the major risk(s) associated with the waste being stored or treated in the tank system(s). (Note—If there already is a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate.)

(e) All tank systems holding dangerous wastes which are acutely or chronically toxic by inhalation must be designed to prevent escape of vapors, fumes, or other emissions into the air.

(6) Inspections.

(a) The owner or operator must develop and follow a schedule and procedure for inspecting overfill controls.

(b) The owner or operator must inspect at least once each operating day:

(i) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

(ii) Data gathered from monitoring any leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and

(iii) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of dangerous waste (e.g., wet spots, dead vegetation).

Note: WAC 173-303-320 requires the owner or operator to remedy any deterioration or malfunction he finds. Subsection (7) of this section requires the owner or operator to notify the department within twenty-four hours of confirming a leak. Also, 40 CFR Part 302 may require the owner or operator to notify the National Response Center of a release.

(c) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

(i) The proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and

(ii) All sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month).

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

(d) The owner or operator must document in the operating record of the facility an inspection of those items in (a) through (c) of this subsection. The owner or operator must keep an inspection log including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made and the date and nature of any repairs or remedial actions taken. The log must be kept at the facility for at least five years from the date of inspection.

(7) Response to leaks or spills and disposition of leaking or unfit-for-use tank systems.

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:

(a) Cessation of use; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of dangerous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(b) Removal of waste from tank system or secondary containment system.

(i) If the release was from the tank system, the owner/operator must, within twenty-four hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of dangerous waste to the environment and to allow inspection and repair of the tank system to be performed.

(ii) If the material released was to a secondary containment system, all released materials must be removed within twenty-four hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) Containment of visible releases to the environment. The owner/operator must immediately conduct a visual inspection of the release and, based upon that inspection:

(i) Prevent further migration of the leak or spill to soils or surface water; and

(ii) Remove, and properly dispose of, any visible contamination of the soil or surface water.

(d) Notifications, reports.

(i) Any release to the environment, except as provided in (d)(ii) of this subsection, must be reported to the department within twenty-four hours of its detection. Any release above the "reportable quantity" must also be reported to the National Response Center pursuant to 40 CFR Part 302.

(ii) A leak or spill of dangerous waste is exempted from the requirements of (d) of this subsection if it is:

(A) Less than or equal to a quantity of one pound, or the "Reportable Quantity" (RQ) established in 40 CFR Part 302, whichever is less; and

(B) Immediately contained and cleaned-up.

(iii) Within thirty days of detection of a release to the environment, a report containing the following information must be submitted to the department:

(A) Likely route of migration of the release;

(B) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

(C) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within thirty days, these data must be submitted to the department as soon as they become available;

(D) Proximity to downgradient drinking water, surface water, and populated areas; and

(E) Description of response actions taken or planned.

(e) Provision of secondary containment, repair, or closure.

(i) Unless the owner/operator satisfies the requirements of (e)(ii) through (iv) of this subsection, the tank system must be closed in accordance with subsection (8) of this section.

(ii) If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

(iii) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

(iv) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of subsection (4) of this section before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of (f) of this subsection are satisfied. If a component is replaced to comply with the requirements of this subitem, that component must satisfy the requirements for new tank systems or components in subsections (3) and (4) of this section. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with subsection (4) of this section prior to being returned to use.

(f) Certification of major repairs. If the owner/operator has repaired a tank system in accordance with (e) of this subsection, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner/operator has obtained a certification by an independent, qualified, registered, professional engineer in accordance with WAC 173-303-810 (13)(a) that the repaired system is capable of handling dangerous wastes without release for the intended life of the system. This certification must be submitted to the department within seven days after returning the tank system to use.

Note: See WAC 173-303-320 for the requirements necessary to remedy a failure. Also, 40 CFR Part 302 may require the owner or operator to notify the National Response Center of certain releases.

(8) Closure and post-closure care.

(a) At closure of a tank system, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as dangerous waste, unless WAC 173-303-070 (2)(a) applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems must meet all of the requirements specified in WAC 173-303-610 and 173-303-620.

(b) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in (a) of this subsection, then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (see WAC 173-303-665(6)). In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in WAC 173-303-610 and 173-303-620.

(c) If an owner or operator has a tank system that does not have secondary containment that meets the requirements of subsection (4)(b) through (f) of this section and is not exempt from the secondary containment requirements in accordance with subsection (4)(g) of this section, then:

(i) The closure plan for the tank system must include both a plan for complying with (a) of this subsection and a contingent plan for complying with (b) of this subsection.

(ii) A contingent post-closure plan for complying with (b) of this subsection must be prepared and submitted as part of the permit application.

(iii) The cost estimates calculated for closure and post-closure care must reflect the costs of complying with the contingent closure plan and the contingent post-closure plan, if those costs are greater than the costs of complying with the closure plan prepared for the expected closure under (a) of this subsection.

(iv) Financial assurance must be based on the cost estimates in (c)(iii) of this subsection.

(v) For the purposes of the contingent closure and post-closure plans, such a tank system is considered to be a landfill, and the contingent plans must meet all of the closure, post-closure, and financial responsibility requirements for landfills under this chapter (WAC 173-303-610 and 173-303-620).

(9) Special requirements for ignitable or reactive wastes.

(a) Ignitable or reactive waste must not be placed in tank systems unless:

(i) The waste is treated, rendered, or mixed before or immediately after placement in the tank system 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)(b) is complied with; or

(ii) The waste is stored or treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react; or

(iii) The tank system is used solely for emergencies.

(b) The owner or operator of a facility which treats or stores ignitable or reactive waste in tanks must locate the tanks in a manner equivalent to the National Fire Protection Association's buffer zone requirements for tanks, contained in Tables 2-1 through 2-6 of the NFPA-30 *Flammable and Combustible Liquids Code* -1981, or as required by state and local fire codes when such codes are more stringent. The owner or operator must also comply with the requirements of WAC 173-303-395 (1)(d).

(10) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, must not be placed in the same tank system, unless WAC 173-303-395 (1)(b) is complied with.

(b) Dangerous waste must not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless WAC 173-303-395 (1)(b) is complied with.

(11) Air emission standards. The owner or operator must manage all hazardous waste placed in a tank in accordance with the applicable requirements of 40 CFR Subparts AA, BB, and CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-640, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-640, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-640, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-640, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-640, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-640, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-640, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-645 Releases from regulated units. (1) Applicability.

(a)(i) Except as provided in (b) of this subsection, the regulations in this section apply to owners and operators of facilities that treat, store, or dispose of dangerous waste. The owner or operator must satisfy the requirements identified in (a)(ii) of this subsection for all wastes (or constituents thereof) contained in solid waste management units at the facility, regardless of the time at which waste was placed in such units.

(ii) All solid waste management units must comply with the requirements in WAC 173-303-646(2). Regulated units (as defined in WAC 173-303-040) must comply with the requirements of subsections (2) through (12) of this section, in lieu of WAC 173-303-646(2), for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The corrective action financial responsibility requirements of WAC 173-303-646(2) apply to corrective action regulated units.

(b) The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under this section if:

(i) The owner or operator is exempted under WAC 173-303-600; or

(ii) He operates a unit which the department finds:

(A) Is an engineered structure;

(B) Does not receive or contain liquid waste or waste containing free liquids;

(C) Is designed and operated to exclude liquid, precipitation, and other run-on and run-off;

(D) Has both inner and outer layers of containment enclosing the waste;

(E) Has a leak detection system built into each containment layer;

(F) The owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods; and

(G) To a reasonable degree of certainty, will not allow dangerous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period.

(iii) The department finds, pursuant to WAC 173-303-655 (8)(d), that the treatment zone of a land treatment unit does not contain levels of dangerous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of WAC 173-303-655(6) has not shown a statistically significant increase in dangerous constituents below the treatment zone during the operating life of the unit. An exemption under this subsection can only relieve an owner or operator of responsibility to meet the requirements of this section during the post-closure care period; or

(iv) The department finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made under this subsection on assumptions that maximize the rate of liquid migration.

(c) The regulations under this section apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the regulations in this section:

(i) Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure in accordance with the removal or decontamination limits specified in WAC 173-303-610 (2)(b);

(ii) Apply during the post-closure care period if the owner or operator is conducting a detection monitoring program under subsection (9) of this section; and

(iii) Apply during the compliance period under subsection (7) of this section, if the owner or operator is conducting a compliance monitoring program under subsection (10) of this section, or a corrective action program under subsection (11) of this section.

(d) Regulations in this section may apply to miscellaneous units when necessary to comply with WAC 173-303-680 (2) through (4).

(e) The director may, in an enforceable document, replace all or part of the requirements of this section with alternative requirements for ground water monitoring and corrective action when he or she determines:

(i) A dangerous waste unit is situated among other solid waste management units or areas of concern, a release has occurred, and both the dangerous waste unit and one or more of the solid waste management units or areas of concern are likely to have contributed to the release; and

(ii) It is not necessary to apply the requirements of this section because the alternative requirements will protect human health and the environment.

(2) Required programs.

(a) Owners and operators subject to this section must conduct a monitoring and response program as follows:

(i) Whenever dangerous constituents under subsection (4) of this section, from a regulated unit are detected at the compliance point under subsection (6) of this section, the owner or operator must institute a compliance monitoring program under subsection (10) of this section. Detected is defined as statistically significant evidence of contamination as described in subsection (9)(f) of this section;

(ii) Whenever the ground water protection standard under subsection (3) of this section, is exceeded, the owner or operator must institute a corrective action program under subsection (11) of this section. Exceeded is defined as statistically significant evidence of increased contamination as described in subsection (10)(h) of this section. Exceeded is defined as statistically significant evidence of contamination as described in WAC 173-303-645 (10)(d);

(iii) Whenever dangerous constituents under subsection (4) of this section, from a regulated unit exceed concentration limits under subsection (5) of this section, in ground water between the compliance point under subsection (6) of this section and the downgradient facility property boundary, the owner or operator must institute a corrective action program under subsection (11) of this section; and

(iv) In all other cases, the owner or operator must institute a detection monitoring program under subsection (9) of this section.

(b) The department will specify in the facility permit the specific elements of the monitoring and response program. The department may include one or more of the programs identified in (a) of this subsection, in the facility permit as may be necessary to protect human health and the environment and will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the department will consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

(3) Ground water protection standard. The owner or operator must comply with conditions specified in the facility permit that are designed to ensure that dangerous constituents under subsection (4) of this section, detected in the ground water from a regulated unit do not exceed the concentration limits under subsection (5) of this section, in the uppermost aquifer underlying the waste management area beyond the

point of compliance under subsection (6) of this section, during the compliance period under subsection (7) of this section. To the extent practical, the department will establish this ground water protection standard in the facility permit at the time the permit is issued. If the department determines that an established standard is not protective enough, or if the department decides that it is not practical to establish standards at the time of permit issuance, the department will establish the ground water protection standard in the facility permit when dangerous constituents have been detected in the ground water from a regulated unit.

(4) Dangerous constituents.

(a) The department will specify in the facility permit the dangerous constituents to which the ground water protection standard of subsection (3) of this section, applies. Dangerous constituents are constituents identified in 40 CFR Part 264 Appendix IX, which is adopted by reference (this list is available from the department), and any other constituents not listed there which have caused a waste to be regulated under this chapter, that may be or have been detected in ground water in the uppermost aquifer underlying a regulated unit and that are reasonably expected to be in or derived from waste contained in a regulated unit, unless the department has excluded them under (b) of this subsection.

The department may also specify in the permit indicator parameters (e.g., specific conductance, pH, total organic carbon (TOC), total organic halogen (TOX), or heavy metals), waste constituents or reaction products as identified in the detection monitoring program under subsection (9)(a) of this section, that provide a reliable indication of the presence of dangerous constituents in the ground water.

(b) The department will exclude a 40 CFR Part 264 Appendix IX, or other identified constituent from the list of dangerous constituents specified in the facility permit if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the department will consider the following:

(i) Potential adverse effects on ground water quality, considering:

(A) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity of ground water and the direction of ground water flow;

(D) The proximity and withdrawal rates of ground water users;

(E) The current and future uses of ground water in the area;

(F) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality;

(G) The potential for health risks caused by human exposure to waste constituents;

(H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(I) The persistence and permanence of the potential adverse effects;

(ii) Potential adverse effects on hydraulically-connected surface water quality, considering:

(A) The volume and physical and chemical characteristics of the waste in the regulated unit;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity and quality of ground water, and the direction of ground water flow;

(D) The patterns of rainfall in the region;

(E) The proximity of the regulated unit to surface waters;

(F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(G) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

(H) The potential for health risks caused by human exposure to waste constituents;

(I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(J) The persistence and permanence of the potential adverse effects; and

(iii) Any identification of underground sources of drinking water and exempted aquifers made pursuant to chapter 90.48 RCW, chapter 270, Laws of 1983, and other applicable state laws and regulations.

(5) Concentration limits.

(a) The department will specify in the facility permit concentration limits in the ground water for dangerous constituents established under subsection (4) of this section. The concentration of a dangerous constituent:

(i) Must not exceed the background level of that constituent in the ground water at the time that limit is specified in the permit; or

(ii) For any of the constituents listed in Table 1 of this subsection, must not exceed the respective value given in that table if the background level of the constituent is below the value given in Table 1; or

(iii) Must not exceed an alternate limit established by the department under (b) of this subsection.

Table 1.
Maximum Concentration of Constituents for Ground Water Protection

Constituent	Maximum Concentration[1]
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin	0.0002
Lindane	0.004

Constituent	Maximum Concentration[1]
Methoxychlor	0.1
Toxaphene	0.005
2,4-D	0.1m
2,4,5-TP Silvex	0.01

[1] Milligrams per liter.

(b) The department will establish an alternate concentration limit for a dangerous constituent if it finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In establishing alternate concentration limits, the department will consider the same factors listed in subsection (4)(b)(i) through (iii) of this section.

(6) Point of compliance.

(a) The department will specify in the facility permit the point of compliance at which the ground water protection standard of subsection (3) of this section, applies and at which monitoring must be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units. Alternatively, the point of compliance may be any closer points identified by the department at the time the permit is issued, considering the risks of the facility, the wastes and constituents managed there, the potential for waste constituents to have already migrated past the alternate compliance point, and the potential threats to ground and surface waters.

(b) The waste management area is the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit. The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit. If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

(7) Compliance period.

(a) The department will specify in the facility permit the compliance period during which the ground water protection standard of subsection (3) of this section applies. The compliance period is the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period).

(b) The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of subsection (10) of this section.

(c) If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in (a) of this subsection, the compliance period is extended until the owner or operator can demonstrate that the ground water protection standard of subsection (3) of this section, has not been exceeded for a period of three consecutive years.

(8) General ground water monitoring requirements.

The owner or operator must comply with the requirements of this subsection for any ground water monitoring program developed to satisfy subsections (9), (10), or (11) of this section.

(a) The ground water monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer that:

(i) Represent the quality of background water that has not been affected by leakage from a regulated unit;

(A) A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

(I) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and

(II) Sampling at other wells will provide an indication of background ground water quality that is representative or more representative than that provided by the upgradient wells; and

(ii) Represent the quality of ground water passing the point of compliance.

(iii) Allow for the detection of contamination when dangerous waste or dangerous constituents have migrated from the waste management area to the uppermost aquifer.

(b) If a facility contains more than one regulated unit, separate ground water monitoring systems are not required for each regulated unit, provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point of dangerous constituents from the regulated units that have entered the ground water in the uppermost aquifer.

(c) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must allow collection of representative ground water samples. Wells must be constructed in such a manner as to prevent contamination of the samples, the sampled strata, and between aquifers and water bearing strata. Wells must meet the requirements set forth in Parts 1 and 3 of chapter 173-160 WAC, "Minimum standards for construction and maintenance of wells."

(d) The ground water monitoring program must include at a minimum, procedures and techniques for:

(i) Decontamination of drilling and sampling equipment;

(ii) Sample collection;

(iii) Sample preservation and shipment;

(iv) Analytical procedures and quality assurance; and

(v) Chain of custody control.

(e) The ground water monitoring program must include consistent sampling and analytical methods that ensure reliable ground water sampling, accurately measure dangerous constituents and indicator parameters in ground water samples, and provide a reliable indication of ground water quality below the waste management area.

(f) The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

(g) In detection monitoring or where appropriate in compliance monitoring, data on each dangerous constituent specified in the permit will be collected from background wells and wells at the compliance point(s). The number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size must be

as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected. The owner or operator will determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit which will be specified in the unit permit upon approval by the department. This sampling procedure will be:

(i) A sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity and hydraulic gradient, and the fate and transport characteristics of the potential contaminants; or

(ii) An alternate sampling procedure proposed by the owner or operator and approved by the department.

(h) The owner or operator will specify one of the following statistical methods to be used in evaluating ground water monitoring data for each hazardous constituent which, upon approval by the department, will be specified in the unit permit. The statistical test chosen must be conducted separately for each dangerous constituent in each well. Where practical quantification limits (pql's) are used in any of the following statistical procedures to comply with (i)(v) of this subsection, the pql must be proposed by the owner or operator and approved by the department. Use of any of the following statistical methods must be protective of human health and the environment and must comply with the performance standards outlined in (i) of this subsection.

(i) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

(ii) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

(iii) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(iv) A control chart approach that gives control limits for each constituent.

(v) Another statistical test method submitted by the owner or operator and approved by the department.

(i) Any statistical method chosen under (h) of this subsection for specification in the unit permit must comply with the following performance standards, as appropriate:

(i) The statistical method used to evaluate ground water monitoring data must be appropriate for the distribution of chemical parameters or dangerous constituents. If the distribution of the chemical parameters or dangerous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.

(ii) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground water protection standard, the test must be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experiment wise error rate for each testing period must be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(iii) If a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values must be proposed by the owner or operator and approved by the department if it finds it to be protective of human health and the environment.

(iv) If a tolerance interval or a prediction interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, must be proposed by the owner or operator and approved by the department if it finds these parameters to be protective of human health and the environment. These parameters will be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(v) The statistical method must account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantification limit (pql) approved by the department under (h) of this subsection that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

(vi) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(j) Ground water monitoring data collected in accordance with (g) of this subsection including actual levels of constituents must be maintained in the facility operating record. The department will specify in the permit when the data must be submitted for review.

(9) Detection monitoring program. An owner or operator required to establish a detection monitoring program under this subsection must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor for indicator parameters (e.g., pH, specific conductance, total organic carbon (TOC), total organic halogen (TOX), or heavy metals), waste constituents, or reaction products that provide a reliable indication of the presence of dangerous constituents in ground water. The department will specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:

(i) The types, quantities, and concentrations of constituents in wastes managed at the regulated unit;

(ii) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;

(iii) The detectability of indicator parameters, waste constituents, and reaction products in ground water; and

(iv) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the ground water background.

(b) The owner or operator must install a ground water monitoring system at the compliance point, as specified under subsection (6) of this section. The ground water monitoring system must comply with subsection (8)(a)(ii), (b), and (c) of this section.

(c) The owner or operator must conduct a ground water monitoring program for each chemical parameter and dangerous constituent specified in the permit pursuant to (a) of this subsection in accordance with subsection (8)(g) of this section. The owner or operator must maintain a record of ground water analytical data as measured and in a form necessary for the determination of statistical significance under subsection (8)(h) of this section.

(d) The department will specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or dangerous constituent specified in the permit under (a) of this subsection in accordance with subsection (8)(g) of this section. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semiannually during detection monitoring.

(e) The owner or operator must determine the ground water flow rate and direction in the uppermost aquifer at least annually.

(f) The owner or operator must determine whether there is statistically significant evidence of contamination for any chemical parameter of dangerous constituent specified in the permit pursuant to (a) of this subsection at a frequency specified under (d) of this subsection.

(i) In determining whether statistically significant evidence of contamination exists, the owner or operator must use the method(s) specified in the permit under subsection (8)(h) of this section. These method(s) must compare data collected at the compliance point(s) to the background ground water quality data.

(ii) The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well as the compliance point within a reasonable period of time after completion of sampling. The department will specify in the facility permit what period of time is reasonable after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.

(g) If the owner or operator determines pursuant to (f) of this subsection that there is statistically significant evidence of contamination for chemical parameters or dangerous constituents specified pursuant to (a) of this subsection at any monitoring well at the compliance point, he or she must:

(i) Notify the department of this finding in writing within seven days. The notification must indicate what chemical parameters or dangerous constituents have shown statistically significant evidence of contamination:

(ii) Immediately sample the ground water in all monitoring wells and determine whether constituents in the list of Appendix IX of 40 CFR Part 264 (which is adopted by reference) are present, and if so, in what concentration.

(iii) For any Appendix IX compounds found in the analysis pursuant to (g)(ii) of this subsection, the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample for the compounds found pursuant to (g)(ii) of this subsection, the dangerous constituents found during this initial Appendix IX analysis will form the basis for compliance monitoring.

(iv) Within ninety days, submit to the department an application for a permit modification to establish a compliance monitoring program meeting the requirements of subsection (10) of this section. The application must include the following information:

(A) An identification of the concentration or any Appendix IX constituent detected in the ground water at each monitoring well at the compliance point;

(B) Any proposed changes to the ground water monitoring system at the facility necessary to meet the requirements of subsection (10) of this section;

(C) Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of subsection (10) of this section;

(D) For each dangerous constituent detected at the compliance point, a proposed concentration limit under subsection (5)(a)(i) or (ii) of this section, or a notice of intent to seek an alternate concentration limit under subsection (5)(b) of this section; and

(v) Within one hundred eighty days, submit to the department:

(A) All data necessary to justify an alternate concentration limit sought under subsection (5)(b) of this section; and

(B) An engineering feasibility plan for a corrective action program necessary to meet the requirement of subsection (11) of this section unless:

(I) All dangerous constituents identified under (g)(ii) of this subsection are listed in Table I of subsection (5) of this section and their concentrations do not exceed the respective values given in that Table; or

(II) The owner or operator has sought an alternate concentration limit under subsection (5)(b) of this section for every dangerous constituent identified under (g)(ii) of this subsection.

(vi) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant difference for chemical parameters or dangerous constituents specified pursuant to (a) of this subsection at any monitoring well at the compliance point, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. The owner operator may make a demon-

stration under this subsection in addition to, or in lieu of, submitting a permit modification application under (g)(iv) of this subsection; however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in (g)(iv) of this subsection unless the demonstration made under this subsection successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this subsection, the owner or operator must:

(A) Notify the department in writing within seven days of determining statistically significant evidence of contamination at the compliance point that he intends to make a demonstration under this subsection;

(B) Within ninety days, submit a report to the department which demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;

(C) Within ninety days, submit to the department an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and

(D) Continue to monitor in accordance with the detection monitoring program established under this section.

(h) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this section, he or she must, within ninety days, submit an application for a permit modification to make any appropriate changes to the program.

(10) Compliance monitoring program. An owner or operator required to establish a compliance monitoring program under this section must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor the ground water to determine whether regulated units are in compliance with the ground water protection standard under subsection (3) of this section. The department will specify the ground water protection standard in the facility permit, including:

(i) A list of the dangerous constituents and parameters identified under subsection (4) of this section;

(ii) Concentration limits under subsection (5) of this section for each of those dangerous constituents and parameters;

(iii) The compliance point under subsection (6) of this section; and

(iv) The compliance period under subsection (7) of this section.

(b) The owner or operator must install a ground water monitoring system at the compliance point as specified under subsection (6) of this section. The ground water monitoring system must comply with subsection (8)(a)(ii), (b), and (c) of this section.

(c) The department will specify the sampling procedures and statistical methods appropriate for the constituents and the facility, consistent with subsection (8)(g) and (h) of this section.

(i) The owner or operator must conduct a sampling program for each chemical parameter or dangerous constituent in accordance with subsection (8)(g) of this section.

(ii) The owner or operator must record ground water analytical data as measured and in form necessary for the determination of statistical significance under subsection (8)(h) of this section for the compliance period of the facility.

(d) The owner or operator must determine whether there is statistically significant evidence of increased contamination for any chemical parameter or dangerous constituent specified in the permit, pursuant to (a) of this subsection, at a frequency specified under (f) of this subsection.

(i) In determining whether statistically significant evidence of increased contamination exists, the owner or operator must use the method(s) specified in the permit under subsection (8)(h) of this section. The method(s) must compare data collected at the compliance point(s) to a concentration limit developed in accordance with subsection (5) of this section.

(ii) The owner or operator must determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The department will specify that time period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.

(e) The owner or operator must determine the rate and direction of ground water flow in the uppermost aquifer at least annually.

(f) The department will specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with subsection (8)(g) of this section. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semiannually during the compliance period of the facility.

(g) The owner or operator must analyze samples from all monitoring wells at the compliance point for all constituents contained in Appendix IX of Part 264 at least annually to determine whether additional dangerous constituents are present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in (f) of this subsection. If the owner or operator finds Appendix IX constituents in the ground water that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month and repeat the Appendix IX analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentration of these additional constituents to the department within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then he or she must report the concentrations of these additional constituents to the department within seven days after completion of the initial analysis and add them to the monitoring list. If the owner or operator determines, pursuant to (d) of this subsection, that any concentration limits under subsection (5) of this section are being exceeded at any monitoring well at the point of compliance, he must:

(i) Notify the department of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded;

(ii) Submit to the department an application for a permit modification to establish a corrective action program meeting the requirements of subsection (11) of this section, within

ninety days, or within sixty days if an engineering feasibility study has been previously submitted to the department under subsection (9)(h)(v) of this section. For regulated units managing EHW, time frames of sixty days and forty-five days, respectively will apply. However, if the department finds that the full extent of the ninety/sixty-day or the sixty/forty-five-day time periods will increase the likelihood to cause a threat to public health, or the environment, it can at its discretion reduce their duration. In specifying shorter limits, the department will consider the following factors:

(A) The physical and chemical characteristics of the dangerous constituents and parameters in the ground water;

(B) The hydrogeological characteristics of the facility and of the surrounding land;

(C) The rate of movement and direction of flow of the affected ground water;

(D) The proximity to and withdrawal rates of ground water users downgradient; and

(E) The current and future uses of ground water in the concerned area; and

(iii) The application must at a minimum include the following information:

(A) A detailed description of corrective actions that will achieve compliance with the ground water protection standard specified in the permit; and

(B) A plan for a ground water monitoring program that will demonstrate the effectiveness of the corrective action.

(i) If the owner or operator determines, pursuant to (d) of this subsection, that the ground water concentration limits under this section are being exceeded at any monitoring well at the point of compliance, he may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. In making a demonstration under this subsection, the owner or operator must:

(i) Notify the department in writing within seven days that he intends to make a demonstration under this subsection;

(ii) Within forty-five days, submit a report to the department which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;

(iii) Within forty-five days, submit to the department an application for a permit modification to make appropriate changes to the compliance monitoring program at the facility; and

(iv) Continue to monitor in accord with the compliance monitoring program established under this section.

(j) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this section, he must, within forty-five days, submit an application for a permit modification to make any appropriate changes to the program.

(11) Corrective action program. An owner or operator required to establish a corrective action program under this section must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must take corrective action to ensure that regulated units are in compliance with the ground water protection standard under subsection (3) of this section. The department will specify the ground water protection standard in the facility permit, including:

(i) A list of the dangerous constituents and parameters identified under subsection (4) of this section;

(ii) Concentration limits under subsection (5) of this section, for each of those dangerous constituents and parameters;

(iii) The compliance point under subsection (6) of this section; and

(iv) The compliance period under subsection (7) of this section.

(b) The owner or operator must implement a corrective action program that prevents dangerous constituents and parameters from exceeding their respective concentration limits at the compliance point by removing the dangerous waste constituents and parameters or treating them in place. The permit will specify the specific measures that will be taken.

(c) The owner or operator must begin corrective action within a reasonable time period after the ground water protection standard is exceeded. The department will specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action will begin and such a requirement will operate in lieu of subsection (10)(i)(ii) of this section.

(d) In conjunction with a corrective action program, the owner or operator must establish and implement a ground water monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under subsection (10) of this section, and must be as effective as that program in determining compliance with the ground water protection standard under subsection (3) of this section, and in determining the success of a corrective action program under (e) of this subsection, where appropriate.

(e) In addition to the other requirements of this section, the owner or operator must conduct a corrective action program to remove or treat in place any dangerous constituents or parameters under subsection (4) of this section, that exceed concentration limits under subsection (5) of this section, in ground water between the compliance point under subsection (6) of this section, and the downgradient facility property boundary; and beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the department that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. For a facility seeking or required to have a permit, the corrective action measures to be taken must be specified in the permit.

(i) Corrective action measures under this subsection must be initiated at the effective date of the modified permit

and completed without time delays considering the extent of contamination.

(ii) Corrective action measures under this subsection may be terminated once the concentration of dangerous constituents and parameters under subsection (4) of this section, is reduced to levels below their respective concentration limits under subsection (5) of this section.

(f) The owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the ground water protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, he must continue that corrective action for as long as necessary to achieve compliance with the ground water protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if he can demonstrate, based on data from the ground water monitoring program under (d) of this subsection, that the ground water protection standard of subsection (3) of this section, has not been exceeded for a period of three consecutive years.

(g) The owner or operator must report in writing to the department on the effectiveness of the corrective action program. The owner or operator must submit these reports semiannually.

(h) If the owner or operator determines that the corrective action program no longer satisfies the requirements of this section, he must, within forty-five days, submit an application for a permit modification to make any appropriate changes to the program.

(12) Use of the Model Toxics Control Act.

(a) The department may require the owner/operator of a facility to fulfill his corrective action responsibilities under WAC 173-303-645 using an enforceable action issued pursuant to the Model Toxics Control Act, as amended, (chapter 70.105D RCW) and its implementing regulations.

(b) Corrective action requirements imposed by an action issued pursuant to the Model Toxics Control Act will be in compliance with the requirements of WAC 173-303-645 and the requirements of chapter 173-303 WAC to the extent required by RCW 70.105D.030 (2)(d) and WAC 173-340-710.

(c) In the case of facilities seeking or required to have a permit under the provisions of this chapter the department will incorporate corrective action requirements imposed pursuant to the Model Toxics Control Act into permits at the time of permit issuance. Such incorporation will in no way affect the timing or scope of review of the Model Toxics Control Act action.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-645, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-645, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-645, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-645, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-645, filed 1/4/89; 84-09-088 (Order DE 83-36), § 173-303-645, filed 4/18/84.]

WAC 173-303-646 Corrective action. (1) Purpose and applicability.

(a) The provisions of this section establish requirements for corrective action for releases of dangerous wastes and dangerous constituents including releases from solid waste management units.

(b) The provisions of this section apply to facilities seeking or required to have a permit to treat, store, recycle or dispose of dangerous waste.

(c) The provisions of this section do not apply to cleanup-only facilities.

(d) For purposes of this section, dangerous constituent means any constituent identified in WAC 173-303-9905 or 40 CFR Part 264 Appendix IX, any constituent that caused a waste to be listed as a dangerous waste or to exhibit a dangerous characteristic under this chapter or to meet a dangerous waste criteria under this chapter, and any constituent that is within the meaning of "hazardous substance" under RCW 70.105D.020(7).

(2) Requirements.

(a) The owner or operator of a facility must institute corrective action as necessary to protect human health and the environment for all releases of dangerous wastes and dangerous constituents, including releases from all solid waste management units at the facility. Corrective action is required regardless of the time at which waste was managed at the facility or placed in such units and regardless of whether such facilities or units were intended for the management of solid or dangerous waste. Assurances of financial responsibility for such corrective action must be provided.

(b) The owner/operator must implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment. Additionally, as necessary to protect human health and the environment, the department may require the owner/operator to implement on site measures to address releases which have migrated beyond the facility boundary. Assurances of financial responsibility for such corrective action must be provided.

(c) In the case of a facility seeking or required to have a permit under the provisions of chapter 173-303 WAC, corrective action must be specified in the permit. The permit will contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completion of such corrective action.

(d) At a minimum, corrective actions must be consistent with the following requirements of chapter 173-340 WAC.

(i) As necessary to select a cleanup action consistent with WAC 173-340-360, 173-340-350, state remedial investigation and feasibility study. Information that is adequate to support selection of a cleanup action consistent with WAC 173-340-360 but was developed under a different authority (for example, as part of closure under WAC 173-303-610 or as part of a federally overseen cleanup) may be used.

(ii) WAC 173-340-360, selection of cleanup actions.

(iii) WAC 173-340-400, cleanup actions.

(iv) WAC 173-340-410, compliance monitoring requirements.

(v) WAC 173-340-420, periodic site reviews.

(vi) WAC 173-340-440, institutional controls.

(vii) WAC 173-340-700 through 173-340–760, cleanup standards.

(3) Use of the Model Toxics Control Act.

(a) The department may require the owner/operator of a facility to fulfill his corrective action responsibilities under subsection (2) of this section using an enforceable action issued pursuant to the Model Toxics Control Act, as amended, (chapter 70.105D RCW) and its implementing regulations.

(b) Corrective action requirements imposed by the department in an action issued pursuant to the Model Toxics Control Act will be in compliance with the requirements of subsection (2) of this section and the requirements of chapter 173-303 WAC to the extent required by RCW 70.105D.030 (2)(d) and WAC 173-340-710.

(c) In the case of facilities seeking or required to have a permit under the provisions of this chapter the department will incorporate corrective action requirements imposed pursuant to the Model Toxics Control Act into permits at the time of permit issuance. Such incorporation will in no way affect the timing or scope of review of the Model Toxics Control Act action.

(4) Corrective action management unit (CAMU).

(a) In accordance with the requirements of this subsection, the director may designate an area at a facility as a corrective action management unit for the purpose of treating, storing or disposing of remediation waste that originates at the same facility in order to implement remedies under this section or to implement other cleanup actions. Placement of dangerous remediation waste into or within a CAMU does not constitute land disposal of dangerous waste. Consolidation or placement of dangerous remediation waste into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.

(b) Designation of a CAMU will not in any way affect the department's existing authorities, including authority under chapter 70.105D RCW, to address clean-up levels, media-specific points of compliance, or other remedy selection decisions.

(c) Designation of a CAMU will not in any way affect the timing or scope of review of any actions taken under the Model Toxics Control Act pursuant to subsection (3) of this section to fulfill the corrective action requirements of subsection (2) of this section or the corrective action requirements of WAC 173-303-645.

(5) Designation of a corrective action management unit.

(a) When designating a CAMU, the director will do so in accordance with subsection (4) of this section, and the following:

(i) The CAMU will facilitate the implementation of reliable, effective, protective, and cost-effective remedies;

(ii) Waste management activities associated with the CAMU will not create unacceptable risks to humans or the environment resulting from exposure to dangerous wastes or dangerous constituents;

(iii) The CAMU will include uncontaminated areas of the facility only if including such areas for the purposes of managing remediation wastes is more protective than management of such wastes at contaminated areas of the facility;

(iv) Areas within the CAMU where wastes remain in place after closure of the CAMU, will be managed and contained so as to minimize future releases of dangerous wastes and dangerous constituents to the extent practicable;

(v) When appropriate and practicable, the CAMU will expedite the timing of remedial activity implementation;

(vi) The CAMU will enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and

(vii) The CAMU will, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

(b) When designating a CAMU, the director will specify requirements for the CAMU including the following:

(i) The areal configuration of the CAMU;

(ii) Requirements for remediation waste management within the CAMU including specification of applicable design, operation, and closure requirements;

(iii) Requirements for ground water and/or vadose zone monitoring that are sufficient to:

(A) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of dangerous waste and dangerous constituents in ground water from sources located within the CAMU; and

(B) Detect and subsequently characterize releases of dangerous waste and dangerous constituents to ground water that may occur from areas of the CAMU in which wastes will remain in place after CAMU closure.

(iv) Requirements for closure that will minimize the need for further maintenance of the CAMU and will include, as appropriate and deemed necessary by the director, the following:

(A) Requirements for excavation, removal, treatment, and/or containment of wastes;

(B) For areas in which wastes will remain after closure of the CAMU, requirements for capping of such areas; and

(C) Requirements for removal and decontamination of equipment, devices, and structures used in remediation waste management activities within the CAMU.

(c) In establishing closure requirements for CAMUs under (b)(iv) of this subsection the director will consider the following factors:

(i) CAMU characteristics;

(ii) Volume of wastes which will remain in place after CAMU closure;

(iii) Potential for releases from the CAMU;

(iv) Physical and chemical characteristics of the waste;

(v) Hydrological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases in and/or from the CAMU; and

(vi) Potential for exposure of humans and environmental receptors if releases were to occur at or from the CAMU.

(d) The director will, for areas of the CAMU in which wastes will remain in place after CAMU closure, specify post-closure requirements to control, minimize, or eliminate, to the extent necessary to protect human health and the envi-

ronment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, and dangerous waste decomposition products to the ground, to ground waters, to surface waters, and to the atmosphere. Such post-closure requirements will include, as necessary to protect human health and the environment, monitoring and maintenance activities and the frequency with which such activities will be performed to ensure the integrity of any cap, final cover, or other containment system.

(e) The owner/operator of a facility must provide sufficient information to enable the director to designate a CAMU in accordance with the criteria in subsections (4), (5)(a) through (d), and (6) of this section.

(f) The director will document the rationale for designating CAMUs and will make such documentation available to the public.

(g) Incorporation of the designation of and requirements for a CAMU into a existing permit must be approved by the director according to the procedures for agency initiated permit modifications under WAC 173-303-830(3), or according to the permit modification procedures of WAC 173-303-830(4).

(6) Incorporation of a regulated unit within a CAMU.

(a) The director may designate a regulated unit (as defined in WAC 173-303-040) as a CAMU, or may incorporate a regulated unit into a CAMU, if:

(i) The regulated unit is closed or closing, meaning it has begun the closure process under WAC 173-303-610 or 173-303-400; and

(ii) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions at the facility.

(b) The requirements of WAC 173-303-610, 173-303-620, 173-303-645, and the unit specific requirements of WAC 173-303-650 through 173-303-680 that applied to the regulated unit will continue to apply to the portion of the CAMU into which the regulated unit was incorporated.

(7) Temporary units (TUs).

(a) In accordance with the requirements of this subsection, the director may designate a tank or container storage area at a facility as a temporary unit for the purpose of treating or storing remediation waste that originates at the same facility in order to implement remedies under this section or to implement other cleanup actions. The director may replace the design, operating and closure standards applicable to dangerous waste tank and container treatment and storage units under this chapter with alternative requirements that protect human health and the environment.

(b) Any temporary unit to which alternative requirements are applied in accordance with (a) of this subsection will be:

(i) Located within the facility boundary; and

(ii) Used only for treatment or storage of remediation wastes managed pursuant to implementation of the corrective action requirements of subsection (2) of this section at the facility.

(c) In establishing standards to be applied to a temporary unit, the director will consider the following factors:

(i) Length of time unit will be in operation;

(ii) Type of unit;

(iii) Volumes of wastes to be managed;

(iv) Physical and chemical characteristics of the wastes to be managed in the unit;

(v) Potential for releases from the unit;

(vi) Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases; and

(vii) Potential for exposure of humans and environmental receptors if releases were to occur from the unit.

(d) The director will specify the length of time, not to exceed one year, a temporary unit will be allowed to operate. The director will also specify design, operating, and closure requirements for the temporary unit.

(e) The director may extend the operating period of a temporary unit for up to one additional year, provided the director determines that:

(i) Continued operation of the unit will not pose a threat to human health and the environment; and

(ii) Continued operation of the unit is necessary to ensure timely and efficient implementation of remedial actions at the facility.

(f) Incorporation of the designation of and requirements for a temporary unit or a time extension for a temporary unit into an existing permit will be:

(i) Approved in accordance with the procedures for agency-initiated permit modifications under WAC 173-303-830(3); or

(ii) Requested by the owner or operator as a Class II modification according to the procedures under WAC 173-303-830(4).

(g) The director will document the rationale for designating a temporary unit and for granting time extensions for temporary units and will make such documentation available to the public.

(8) Staging piles. The requirements for staging piles in 40 CFR Part 264.554 are incorporated by reference.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-646, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-646, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-646, filed 12/8/93, effective 1/8/94.]

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) Any surface impoundment that is not covered by (j) of this subsection must have a liner for all portions of the impoundment (except for an existing portion of a surface impoundment). The liner must be 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 impound-

ments 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 must submit an engineering report with their permit application under WAC 173-303-806(4) stating the basis for selecting the liner(s). The report must be certified by an independent, qualified registered 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:

(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 attenuative 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.

(j) The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing TSD facility."

(i) The liner system must include:

(A) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1 x 10^{-7}/cm/sec.

(ii) The liners must comply with (a)(i)(A), (B), and (C) of this subsection.

(iii) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of dangerous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this paragraph are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of one percent or more;

(B) Constructed of granular drainage materials with a hydraulic conductivity of 1 x 10^{-1}/cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of

synthetic or geonet drainage materials with a transmissivity of 3 x 10^{-4}/m^2sec or more;

(C) Constructed of materials that are chemically resistant to the waste managed in the surface impoundment and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes and any waste cover materials or equipment used at the surface impoundment;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(k) The department may approve alternative design or operating practices to those specified in (j) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal system specified in (j) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(l) The double liner requirement set forth in (j) of this subsection may be waived by the department for any monofill, if:

(i) The monofill contains only dangerous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes dangerous for reasons other than the toxicity characteristic in WAC 173-303-090(8) or the toxicity criteria at WAC 173-303-100(5); and

(ii)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of this paragraph, the term "liner" means a liner designed, constructed, installed, and operated to prevent dangerous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent dangerous waste from migrating beyond the liner to adjacent subsurface soil, ground water, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of (j) of this subsection on the basis of a liner designed, constructed, installed, and operated to prevent dangerous waste from passing beyond the liner, at the closure of such impoundment, the owner or operator must remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment will comply with appropriate post-closure requirements, including but not limited to ground water monitoring and corrective action;

(B) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in 40 CFR Section 144.3); and

(C) The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under RCRA section 3005(c); or

(iii) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any dangerous constituent into ground water or surface water at any future time.

(m) The owner or operator of any replacement surface impoundment unit is exempt from (j) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of sections 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Reserve.

(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; and

(iii) 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.

(d)(i) An owner or operator required to have a leak detection system under subsection (2)(j) or (k) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(ii) After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semi annually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semiannual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(iii) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the department based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

(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 subsections (2)(j)(ii)(D) and (E), and (4)(d) of this section, and comply with all other applicable leak detection system requirements of this chapter;

(iii) Maintain and monitor the ground water monitoring system and comply with all applicable requirements of WAC 173-303-645; 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.

Reserve.

(7) Special requirements for ignitable or reactive waste. Ignitable or reactive waste must not be placed in a surface impoundment, unless the waste and impoundment satisfy all applicable requirements of WAC 173-303-140 (2)(a), and:

(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.

(10) Action leakage rate.

(a) The department must approve an action leakage rate for surface impoundment units subject to WAC 173-303-650 (2)(j) or (k). The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under WAC 173-303-650 (4)(d) to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period, and if the unit is closed in accordance with WAC 173-303-650 (6)(b), monthly during the post-closure care period when monthly monitoring is required under WAC 173-303-650 (4)(d).

(11) Response actions.

(a) The owner or operator of surface impoundment units subject to subsection (2)(j) or (k) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit

for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(vi) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the department the results of the analyses specified in (b) (iii), (iv), and (v) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b) (iii), (iv), and (v) of this subsection, the owner or operator must:

(i) Assess the source of liquids and amounts of liquids by source;

(ii) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(iv) Document why such assessments are not needed.

(12) Air emission standards. The owner or operator must manage all hazardous waste placed in a surface impoundment in accordance with the applicable requirements of 40 CFR Subparts AA, BB, and CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692.

(13) Existing and newly regulated surface impoundments. The requirements of 3005 (j)(1) and (6) of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, are incorporated by reference. Surface impoundments regulated for the first time by a listing or characteristic adopted after November 8, 1984, must comply with new unit requirements or stop dangerous waste activity by four years after the date of adoption of the new listing or characteristic.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-650, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-650, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-650, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-650, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-650, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-650, filed 3/11/88; 86-12-057 (Order DE-85-10), § 173-303-650, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-650, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-650, filed 2/10/82.]

WAC 173-303-655 Land treatment. (1) Applicability. The regulations in this subpart apply to owners and operators of facilities that treat or dispose of dangerous waste in land treatment units, except as WAC 173-303-600 provides otherwise.

(2) Treatment program.

(a) An owner or operator subject to this section must establish a land treatment program that is designed to ensure that dangerous constituents placed in or on the treatment zone are degraded, transformed, or immobilized within the treatment zone. The department will specify in the facility permit the elements of the treatment program, including:

(i) The wastes that are capable of being treated at the unit based on a demonstration under subsection (3) of this section;

(ii) Design measures and operating practices necessary to maximize the success of degradation, transformation, and immobilization processes in the treatment zone in accordance with subsection (4)(a) of this section; and

(iii) Unsaturated zone monitoring provisions meeting the requirements of subsection (6) of this section.

(b) The department will specify in the facility permit the dangerous constituents that must be degraded, transformed, or immobilized under this section. Dangerous constituents are constituents identified in WAC 173-303-9905, and any other constituents which, although not listed in WAC 173-303-9905, cause a waste to be regulated under this chapter, that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

(c) The department will specify the vertical and horizontal dimensions of the treatment zone in the facility permit. The treatment zone is the portion of the unsaturated zone below, and including, the land surface in which the owner or operator intends to maintain the conditions necessary for effective degradation, transformation, or immobilization of dangerous constituents. The maximum depth of the treatment zone must be:

(i) No more than 1.5 meters (5 feet) below the initial soil surface; and

(ii) More than 3 meters (10 feet) above the seasonal high water table; except that the owner or operator may demonstrate to the satisfaction of the department that a distance of less than 3 meters will be adequate. In no case will the distance be less than 1 meter.

(3) Treatment demonstration.

(a) For each waste that will be applied to the treatment zone, the owner or operator must demonstrate, prior to application of the waste, that dangerous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone.

(b) In making this demonstration, the owner or operator may use field tests, laboratory analyses, available data, or, in the case of existing units, operating data. If the owner or operator intends to conduct field tests or laboratory analyses in order to make the demonstration required under (a) of this subsection, he must obtain a land treatment demonstration permit under WAC 173-303-808. The department will specify in this permit the testing, analytical, design, and operating requirements (including the duration of the tests and analyses, and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure, and clean-up activities) necessary to meet the requirements in (c) of this subsection.

(c) Any field test or laboratory analysis conducted in order to make a demonstration under (a) of this subsection must:

(i) Accurately simulate the characteristics and operating conditions for the proposed land treatment unit including:

(A) The characteristics of the waste and of dangerous constituents present;

(B) The climate in the area;

(C) The topography of the surrounding area;

(D) The characteristics and depth of the soil in the treatment zone; and

(E) The operating practices to be used at the unit;

(ii) Be likely to show that dangerous constituents in the waste to be tested will be completely degraded, transformed, or immobilized in the treatment zone of the proposed land treatment unit; and

(iii) Be conducted in a manner that protects human health and the environment considering:

(A) The characteristics of the waste to be tested;

(B) The operating and monitoring measures taken during the course of the test;

(C) The duration of the test;

(D) The volume of waste used in the test; and

(E) In the case of field tests, the potential for migration of dangerous constituents to ground water or surface water.

(4) Design and operating requirements. The department will specify in the facility permit how the owner or operator will design, construct, operate, and maintain the land treatment unit in compliance with this subsection.

(a) The owner or operator must design, construct, operate, and maintain the unit to maximize the degradation, transformation, and immobilization of dangerous constituents in the treatment zone. The owner or operator must design, construct, operate, and maintain the unit in accordance with all design and operating conditions that were used in the treatment demonstration under subsection (3) of this section. At a minimum, the department will specify in the facility permit:

(i) The rate and method of waste application to the treatment zone;

(ii) Measures to control soil pH;

(iii) Measures to enhance microbial or chemical reactions (e.g., fertilization, tilling); and

(iv) Measures to control the moisture content of the treatment zone.

(b) The owner or operator must design, construct, operate, and maintain the treatment zone to minimize run-off of dangerous constituents during the active life of the land treatment unit.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the treatment zone 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 the design capacity of the system.

(f) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator must control wind dispersal.

(g) The owner or operator must inspect the unit weekly and after storms to detect evidence of:

(i) Deterioration, malfunctions, or improper operation of run-on and run-off control systems; and

(ii) Improper functioning of wind dispersal control measures.

(5) Food chain crops. The department may allow the growth of food chain crops in or on the treatment zone only if the owner or operator satisfies the conditions of this subsection. The department will specify in the facility permit the specific food chain crops which may be grown.

(a)(i) The owner or operator must demonstrate that there is no substantial risk to human health caused by the growth of such crops in or on the treatment zone by demonstrating, prior to the planting of such crops, that dangerous constituents other than cadmium:

(A) Will not be transferred to the food or feed portions of the crop by plant uptake or direct contact, and will not otherwise be ingested by food chain animals (e.g., by grazing); or

(B) Will not occur in greater concentrations in or on the food or feed portions of crops grown on the treatment zone than in or on identical portions of the same crops grown on untreated soils under similar conditions in the same region.

(ii) The owner or operator must make the demonstration required under (a)(i) of this subsection prior to the planting of crops at the facility for all dangerous constituents that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

(iii) In making such a demonstration, the owner or operator may use field tests, greenhouse studies, available data, or, in the case of existing units, operating data, and must:

(A) Base the demonstration on conditions similar to those present in the treatment zone, including soil characteristics (e.g., pH, cation exchange capacity), specific wastes, application rates, application methods, and crops to be grown; and

(B) Describe the procedures used in conducting any tests, including the sample selection criteria, sample size, analytical methods, and statistical procedures.

(iv) If the owner or operator intends to conduct field tests or greenhouse studies in order to make the demonstration he must obtain a permit for conducting such activities.

(b) The owner or operator must comply with the following conditions if cadmium is contained in wastes applied to the treatment zone;

(i)(A) The pH of the waste and soil mixture must be 6.5 or greater at the time of each waste application, except for waste containing cadmium at concentrations of 2 mg/kg (dry weight) or less;

(B) The annual application of cadmium from waste must not exceed 0.5 kilograms per hectare (kg/ha) on land used for production of tobacco, leafy vegetables, or root crops grown for human consumption. For other food chain crops, the annual cadmium application rate must not exceed:

Time period	Annual Cd application rate (kilograms per hectare)
Present to June 30, 1984	2.0
July 1, 1984 to Dec. 31, 1986	1.25
Beginning Jan. 1, 1987	0.5

(C) The cumulative application of cadmium from waste must not exceed 5kg/ha if the waste and soil mixture has a pH of less than 6.5; and

(D) If the waste and soil mixture has a pH of 6.5 or greater or is maintained at a pH of 6.5 or greater during crop growth, the cumulative application of cadmium from waste must not exceed: 5 kg/ha if soil cation exchange capacity (CEC) is less than 5 meq/100g; 10 kg/ha if soil CEC is 5-15 meq/100g; and 20 kg/ha if soil CEC is greater than 15 meq/100g; or

(ii)(A) Animal feed must be the only food chain crop produced;

(B) The pH of the waste and soil mixture must be 6.5 or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level must be maintained whenever food chain crops are grown;

(C) There must be an operating plan which demonstrates how the animal feed will be distributed to preclude ingestion by humans. The operating plan must describe the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses; and

(D) Future property owners must be notified by a stipulation in the land record or property deed which states that the property has received waste at high cadmium application rates and that food chain crops must not be grown except in compliance with (b)(ii) of this subsection.

(6) Unsaturated zone monitoring. An owner or operator subject to this section must establish an unsaturated zone monitoring program to discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor the soil and soil-pore liquid to determine whether dangerous constituents migrate out of the treatment zone.

(i) The department will specify the dangerous constituents to be monitored in the facility permit. The dangerous constituents to be monitored are those specified under subsection (2)(b) of this section.

(ii) The department may require monitoring for principal dangerous constituents (PDCs) in lieu of the constituents specified under subsection (2)(b) of this section. PDCs are dangerous constituents contained in the wastes to be applied at the unit that are the most difficult to treat, considering the combined effects of degradation, transformation, and immobilization. The department will establish PDCs if it finds, based on waste analyses, treatment demonstrations, or other data, that effective degradation, transformation, or immobilization of the PDCs will assure treatment at least equivalent levels for the other dangerous constituents in the wastes.

(b) The owner or operator must install an unsaturated zone monitoring system that includes soil monitoring using soil cores and soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system must consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that:

(i) Represent the quality of background soil-pore liquid quality and the chemical make-up of soil that has not been affected by leakage from the treatment zone; and

(ii) Indicate the quality of soil-pore liquid and the chemical make-up of the soil below the treatment zone.

(c) The owner or operator must establish a background value for each dangerous constituent to be monitored under (a) of this subsection. The permit will specify the background values for each constituent or specify the procedures to be used to calculate the background values.

(i) Background soil values may be based on a one-time sampling at a background plot having characteristics similar to those of the treatment zone.

(ii) Background soil-pore liquid values must be based on at least quarterly sampling for one year at a background plot having characteristics similar to those of the treatment zone.

(iii) The owner or operator must express all background values in a form necessary for the determination of statistically significant increases under (f) of this subsection.

(iv) In taking samples used in the determination of all background values, the owner or operator must use an unsaturated zone monitoring system that complies with (b)(i) of this subsection.

(d) The owner or operator must conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The department will specify the frequency and timing of soil and soil-pore liquid monitoring in the facility permit after considering the frequency, timing, and rate of waste application, and the soil permeability. The owner or operator must express the results of soil and soil-pore liquid monitoring in a form necessary for the determination of statistically significant increases under (f) of this subsection.

(e) The owner or operator must use consistent sampling and analysis procedures that are designed to ensure sampling results that provide a reliable indication of soil-pore liquid quality and the chemical make-up of the soil below the treatment zone. At a minimum, the owner or operator must implement procedures and techniques for:

(i) Sample collection;

(ii) Sample preservation and shipment;

(iii) Analytical procedures; and

(iv) Chain of custody control.

(f) The owner or operator must determine whether there is a statistically significant change over background values for any dangerous constituent to be monitored under (a) of this subsection, below the treatment zone each time he conducts soil monitoring and soil-pore liquid monitoring under (d) of this subsection.

(i) In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent, as determined under (d) of this subsection, to the background value for that constituent according to the statistical procedure specified in the facility permit under this subsection.

(ii) The owner or operator must determine whether there has been a statistically significant increase below the treatment zone within a reasonable time period after completion of sampling. The department will specify that time period in the facility permit after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of soil and soil-pore liquid samples.

(iii) The owner or operator must determine whether there is a statistically significant increase below the treatment zone using a statistical procedure that provides reasonable confidence that migration from the treatment zone will be identified. The department will specify a statistical procedure in the facility permit that it finds:

(A) Is appropriate for the distribution of the data used to establish background values; and

(B) Provides a reasonable balance between the probability of falsely identifying migration from the treatment zone and the probability of failing to identify real migration from the treatment zone.

(g) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant increase of dangerous constituents below the treatment zone, he must:

(i) Notify the department of his finding in writing within seven days. The notification must indicate what constituents have shown statistically significant increases;

(ii) Within forty-five days, submit to the department an application for a permit modification to amend the operating practices at the facility in order to maximize the success of degradation, transformation, or immobilization processes in the treatment zone; and

(iii) Continue to monitor in accordance with the unsaturated zone monitoring program established under this subsection.

(h) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant increase of dangerous constituents below the treatment zone, he may demonstrate that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. While the owner or operator may make a demonstration under this subsection, he is not relieved of the requirement to submit concurrently a permit modification application within the forty-five-day period, unless the demonstration made under this subsection successfully shows that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. In making a demonstration under this subsection, the owner or operator must:

(i) Notify the department in writing within seven days of determining a statistically significant increase below the treatment zone that he intends to make a demonstration under this subsection;

(ii) Within forty-five days, submit a report to the department demonstrating that a source other than the regulated units caused the increase or that the increase resulted from error in sampling, analysis, or evaluation;

(iii) Within forty-five days, submit to the department an application for a permit modification to make any appropriate changes to the unsaturated zone monitoring program at the facility; and

(iv) Continue to monitor in accordance with the unsaturated zone monitoring program established under this subsection.

(7) Recordkeeping. The owner or operator must include dangerous waste application dates and rates in the operating record required under WAC 173-303-380.

(8) Closure and post-closure care.

(a) During the closure period the owner or operator must:

(i) Continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of dangerous constituents within the treatment zone as required under subsection (4)(a) of this section, except to the extent such measures are inconsistent with (a)(viii) of this subsection;

(ii) Continue all operations in the treatment zone to minimize run-off of dangerous constituents as required under subsection (4)(b) of this section;

(iii) Maintain the run-on control system required under subsection (4)(c) of this section;

(iv) Maintain the run-off management system required under subsection (4)(d) of this section;

(v) Control wind dispersal of dangerous waste if required under subsection (4)(f) of this section;

(vi) Continue to comply with any prohibitions or conditions concerning growth of food chain crops under subsection (5) of this section;

(vii) Continue unsaturated zone monitoring in compliance with subsection (6) of this section, except that soil-pore liquid monitoring may be terminated ninety days after the last application of waste to the treatment zone; and

(viii) Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of dangerous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.

(b) For the purpose of complying with WAC 173-303-610(6) when closure is completed, the owner or operator may submit to the department a certification by an independent qualified soil scientist, in lieu of an independent, qualified registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

(c) During the post-closure care period the owner or operator must:

(i) Continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of dangerous constituents in the treatment zone to the extent that such measures are consistent with other post-closure care activities;

(ii) Maintain a vegetative cover over closed portions of the facility;

(iii) Maintain the run-on control system required under subsection (4)(c) of this section;

(iv) Maintain the run-off management system required under subsection (4)(d) of this section;

(v) Control wind dispersal of dangerous waste, if required under subsection (4)(f) of this section;

(vi) Continue to comply with any prohibitions or conditions concerning growth of food chain crops under subsection (5) of this section; and

(vii) Continue unsaturated zone monitoring in compliance with subsection (6) of this section, except that soil-pore liquid monitoring may be terminated one hundred eighty days after the last application of waste to the treatment zone.

(d) The owner or operator is not subject to regulation under (a)(viii) and (c) of this subsection, if the department finds that the level of dangerous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in (d)(iii) of this subsection. The owner or operator may submit such a demonstration to the department at any time during the closure or post-closure care periods. For the purposes of this subsection:

(i) The owner or operator must establish background soil values and determine whether there is a statistically significant increase over those values for all dangerous constituents specified in the facility permit under subsection (2)(b) of this section;

(A) Background soil values may be based on a one-time sampling of a background plot having characteristics similar to those of the treatment zone;

(B) The owner or operator must express background values and values for dangerous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under (d)(iii) of this subsection;

(ii) In taking samples used in the determination of background and treatment zone values, the owner or operator must take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical make-up of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively;

(iii) In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator must use a statistical procedure that:

(A) Is appropriate for the distribution of the data used to establish background values; and

(B) Provides a reasonable balance between the probability of falsely identifying dangerous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.

(e) The owner or operator is not subject to regulation under WAC 173-303-645 if the department finds that the owner or operator satisfies (d) of this subsection, and if unsaturated zone monitoring under subsection (6) of this section, indicates that dangerous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

(9) Special requirements for ignitable or reactive waste. The owner or operator must not apply ignitable or reactive waste to the treatment zone unless the waste and the treatment zone meet all applicable requirements of WAC 173-303-140 (2)(a), and:

(a) The waste is immediately incorporated into the soil 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 (5) and (7); and

(ii) WAC 173-303-395 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.

(10) Special requirements for incompatible wastes. The owner or operator must not place incompatible wastes, or incompatible wastes and materials, in or on the same treatment zone, unless WAC 173-303-395 (1)(b) is complied with.

(11) Special requirements for extremely hazardous waste. Under no circumstances will EHW be allowed to remain in a closed land treatment unit after concluding the post-closure care period. If EHW remains at the end of the scheduled post-closure care period specified in the permit, then the department will either extend the post-closure care period, or require that all EHW be disposed of off-site or that it be treated. In deciding whether to extend post-closure care or require disposal or treatment, the department will take into account the likelihood that the waste will or will not continue to degrade in the land treatment unit to the extent that it is no longer EHW. For the purposes of this subsection, EHW will be considered to remain in a land treatment unit if representative samples of the treatment zone are designated as EHW. Procedures for representative sampling and testing will be specified in the permit.

(12) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) Dangerous wastes F020, F021, F022, F023, F026, or F027 must not be placed in a land treatment unit unless the owner or operator operates the facility 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 for land treatment facilities managing dangerous wastes F020, F021, F022, F023, F026, or F027 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.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-655, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-655, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-655, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-655, filed 4/18/84.]

WAC 173-303-660 Waste piles. (1) Applicability.

(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) Reserve.

(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) The owner or operator must 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 must be certified by an independent, qualified registered 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.

(j) The owner or operator of each new waste pile unit on which construction commences after January 29, 1992, each lateral expansion of a waste pile unit on which construction commences after July 29, 1992, and each replacement of an existing waste pile unit that commences reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing facility."

(i) The liner system must include:

(A) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1 x 10^{-7} cm/sec.

(C) The liners must comply with (a)(i), (A), (B), and (C) of this subsection.

(ii) The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and post-closure care period. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed twelve inches (30.5 cm). The leachate collection and removal system must comply with (j)(iii) (D) and (E) of this subsection.

(iii) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of dangerous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this paragraph are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of one percent or more;

(B) Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more:

(C) Constructed of materials that are chemically resistant to the waste managed in the waste pile and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the waste pile;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(k) The department may approve alternative design or operating practices to those specified in (j) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in (c) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(l) Subitem (j) of this subsection does not apply to monofills that are granted a waiver by the department in accordance with WAC 173-303-650 (2)(l).

(m) The owner or operator of any replacement waste pile unit is exempt from (j) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of section 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Action leakage rate.

(a) The department must approve an action leakage rate for waste piles subject to subsection (2)(j) or (k) of this section. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly flow rate from the monitoring data obtained under subsection (5)(c) of this section to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period.

(4) Response actions.

(a) The owner or operator of waste pile units subject to subsection (2)(j) or (k) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

(vi) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the department the results of the analyses specified in (b) of this subsection and in subsections (3), (4), and (5) of this section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b) (C), (D), and (E) of this subsection, the owner or operator must:

(i)(A) Assess the source of liquids and amounts of liquids by source;

(B) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(ii) Document why such assessments are not needed.

(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) Proper functioning of wind dispersal control systems; and

(iii) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

(c) An owner or operator required to have a leak detection system under subsection (2)(j) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(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 (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 an independent, qualified registered 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.

(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 waste pile, unless the waste and waste pile satisfy all applicable requirements of WAC 173-303-140 (2)(a), and:

(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

(ii) The generator complies with WAC 173-303-395 (1)(d).

(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 post-closure 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 practicably removed or decontaminated (except that no EHW may ever be left in place), he must close the facility and perform post-closure care in accordance with the closure and post-closure 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 practicably removed at closure; and

(B) 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 a pile 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) 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.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-660, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-660, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-660, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-660, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-660, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-660, filed 2/10/82.]

WAC 173-303-665 Landfills. (1) Applicability. The regulations in this section apply to owners and operators of facilities that dispose of dangerous waste in landfills, except as WAC 173-303-600 provides otherwise. No landfill will be permitted to dispose of EHW, except for the Hanford facility under WAC 173-303-700.

(2) Design and operating requirements.

(a) Any landfill that is not covered by (h) of this subsection must have a liner system for all portions of the landfill (except for an existing portion of a landfill). The liner system must have:

(i) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or ground water or surface water at anytime during the active life (including the closure period) of the landfill. The liner must be constructed of materials that prevent wastes from passing into the liner during the active life of the facility. The owner or operator must submit an engineering report with his permit application under WAC 173-303-806(4) stating the basis for selecting the liner(s). The 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.

(h) The owner or operator of each new landfill unit on which construction commences after January 29, 1992, each lateral expansion of a landfill unit on which construction commences after July 29, 1992, and each replacement of an existing landfill unit that commences reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing facility."

(i) The liner system must:

(A) Include a top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) Include a composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(C) The liners must comply with (a)(i)(A), (B), and (C) of this subsection.

(ii) The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and post-closure care period. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed twelve inches (30.5 cm). The leachate collection and removal system must comply with (h)(iii) and (iv) of this subsection.

(iii) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of dangerous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this subsection are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of one percent or more;

(B) Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more;

(C) Constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the landfill;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(j) The department may approve alternative design or operating practices to those specified in (h) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in (c) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(k) The double liner requirement set forth in (h) of this subsection may be waived by the department for any monofill, if:

(i) The monofill contains only dangerous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes dangerous for reasons other than the Toxicity Characteristic in WAC 173-303-090(8), with dangerous waste numbers D004 through D017 or the toxicity criteria at WAC 173-303-100(5); and

(ii)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking;

(B) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in 40 CFR section 144.3); and

(C) The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under RCRA 3005(c); or

(D) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any dangerous constituent into ground water or surface water at any future time.

(l) The owner or operator of any replacement landfill unit is exempt from (h) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of section 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Reserve.

(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) Proper functioning of wind dispersal control systems; and

(iii) The presence of leachate in and proper functioning of leachate collection and removal systems.

(c)(i) An owner or operator required to have a leak detection system under subsection (2)(h) or (j) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(ii) After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semiannually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semiannual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(iii) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the department based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

(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 post-closure 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 post-closure requirements contained in WAC 173-303-610 (7), (8), (9), and (10) including maintenance

and monitoring throughout the post-closure 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 subsections (2)(h) and (4)(c) 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) Reserve.

(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.

(8) Action leakage rate.

(a) The department must approve an action leakage rate for surface impoundment units subject to subsection (2)(h) or (j) of this section. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under subsection (2)(h) of this section, to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period, and monthly during the post-closure care period when monthly monitoring is required under subsection (9) of this section.

(9) Response actions.

(a) The owner or operator of landfill units subject to subsection (2)(h) or (j) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

(vi) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the department the results of the analyses specified in (b)(iii), (iv), and (v) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b)(iii), (iv), and (v) of this subsection, the owner or operator must:

(i) Assess the source of liquids and amounts of liquids by source;

(ii) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(iv) Document why such assessments are not needed.

(10) Special requirements for ignitable or reactive waste.

(a) Except as provided in subsection (8)(b) of this section, and in WAC 173-303-161, ignitable or reactive waste must not be placed in a landfill, unless the waste and landfill meet all applicable requirements for owners and operators of dangerous waste treatment, storage and disposal facilities contained in this chapter, and:

(i) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090 (5) or (7); and

(ii) WAC 173-303-395(1) is complied with.

(b) Except for prohibited wastes which remain subject to treatment standards in WAC 173-303-140 (2)(a), ignitable wastes in containers may be landfilled without meeting the requirements of (a) of this subsection, provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes must be disposed of in nonleaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; must be covered daily with soil or other noncombustible material to minimize the potential for ignition of the wastes; and must not be disposed of in cells that contain or will contain other wastes

which may generate heat sufficient to cause ignition of the waste.

(11) Special requirements for hazardous wastes F020, F021, F022, F023, F026, and F027.

(a) Hazardous wastes F020, F021, F022, F023, F026, and F027 must not be placed in landfills unless the owner or operator operates the landfill in accord 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 the 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 requirements.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary for landfills managing hazardous wastes F020, F021, F022, F023, F026, and F027 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.

(12) Special requirements for containers. Unless they are very small, such as an ampule, containers must be either:

(a) At least ninety percent full when placed in the landfill; or

(b) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-665, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-665, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-665, filed 1/5/88, effective 2/5/88; 86-12-057 (Order DE-85-10), § 173-303-665, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-665, filed 4/18/84.]

WAC 173-303-670 Incinerators. (1) Applicability.

(a) Except as WAC 173-303-600 provides otherwise, the regulations in this section apply to owners and operators of facilities that incinerate dangerous waste and to owners and operators who burn dangerous waste in boilers or industrial furnaces in order to destroy them, or who burn dangerous waste in boilers or in industrial furnaces for any recycling purpose and elect to be regulated under this section.

(b) The department may, in establishing permit conditions, exempt the facility from all requirements of this section except subsection (2) of this section, waste analysis, and subsection (8) of this section, closure, if the department finds, after an examination of the waste analysis included with Part B of the owner/operator's permit application, that the waste to be burned:

(i)(A) Is either listed as a dangerous waste in WAC 173-303-080 only because it is ignitable or, that the waste is designated only as an ignitable dangerous waste under WAC 173-303-090; or

(B) Is either listed in WAC 173-303-080 or is designated under WAC 173-303-090 solely because it is reactive for the characteristics described in WAC 173-303-090 (7)(a)(i), (ii), (iii), (vi), (vii) and (viii), and will not be burned when other dangerous wastes are present in the combustion zone; and

(ii) Contains none of the dangerous constituents listed in WAC 173-303-9905 above significant concentration limits; and

(iii) Is not designated by the dangerous waste criteria of WAC 173-303-100.

(c) The owner or operator of an incinerator may conduct trial burns, subject only to the requirements of WAC 173-303-807, trial burn permits.

(2) Waste analysis.

(a) As a portion of a trial burn plan required by WAC 173-303-807, or with Part B of his permit application, the owner or operator must have included an analysis of his waste feed sufficient to provide all information required by WAC 173-303-807 or 173-303-806 (3) and (4).

(b) Throughout normal operation the owner or operator must conduct sufficient waste analysis to verify that waste feed to the incinerator is within the physical and chemical composition limits specified in his permit (under subsection (6)(b) of this section).

(3) Designation of principal organic dangerous constituents and dangerous combustion byproducts. Principal organic dangerous constituents (PODCs) and dangerous combustion byproducts must be treated to the extent required by the performance standards specified in subsection (4) of this section. For each waste feed to be burned, one or more PODCs and dangerous combustion byproducts will be specified in the facility's permit from among those constituents listed in WAC 173-303-9905 and, to the extent practical, from among those constituents which contribute to the toxicity, persistence, or carcinogenicity of wastes designated under WAC 173-303-100. This specification will be based on the degree of difficulty of incineration of the organic constituents of the waste feed and its combustion byproducts and their concentration or mass, considering the results of waste analyses and trial burns or alternative data submitted with Part B of the facility's permit application. Organic constituents or byproducts which represent the greatest degree of difficulty of incineration will be those most likely to be designated as PODCs and dangerous combustion byproducts. Constituents are more likely to be designated as PODCs or dangerous combustion byproducts if they are present in large quantities or concentrations. Trial PODCs will be designated for performance of trial burns in accordance with the procedure specified in WAC 173-303-807 for obtaining trial burn permits. Trial dangerous combustion byproducts may be designated under the same procedures.

(4) Performance standards. An incinerator burning dangerous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under subsection (6) of this section, it will meet the following performance standards:

(a)(i) Except as provided in (a)(ii) of this subsection, an incinerator burning dangerous waste must achieve a destruction and removal efficiency (DRE) of 99.99 percent for each PODC designated (under subsection (3) of this section) in its permit for each waste feed. DRE is determined for each PODC from the following equation:

$$DRE = \frac{(W_{in} - W_{out}) \times 100\%}{W_{in}}$$

Where:

W_{in} = Mass feed rate of one PODC in the waste stream feeding the incinerator, and

W_{out} = Mass emission rate of the same PODC present in exhaust emissions prior to release to the atmosphere.

(ii) An incinerator burning dangerous wastes F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic dangerous constituent (PODCs) designated (under subsection (3) of this section) in its permit. This performance must be demonstrated on PODCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each PODCs from the equation in subsection (4)(a)(i) of this section. In addition, the owner or operator of the incinerator must notify the department of his intent to incinerate dangerous wastes F020, F021, F022, F023, F026, or F027.

(b) Incinerators burning dangerous waste must destroy dangerous combustion byproducts designated under subsection (3) of this section so that the total mass emission rate of these byproducts emitted from the stack is no more than .01 percent of the total mass feed rate of PODCs fed into the incinerator.

(c)(i) An incinerator burning dangerous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or one percent of the HCl in the stack gas prior to entering any pollution control equipment.

(ii) An incinerator burning dangerous waste must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the formula:

$$Pc = \frac{Pm \times 14}{21\text{-}Y}$$

Where Pc is the corrected concentration of particulate matter, Pm is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in 40 CFR Part 60, Appendix A (Method 3). This correction procedure is to be used by all dangerous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the department will select an appropriate correction procedure to be specified in the facility permit.

(d) The emission standards specified in (c) of this subsection must be met when no other more stringent standards exist. Where a state or local air pollution control authority has jurisdiction and has more stringent emission standards, an incinerator burning dangerous wastes must comply with the applicable air pollution control authority's emission standards (including limits based on best available control technology).

(e) For purposes of permit enforcement, compliance with the operating requirements specified in the permit (under subsection (6) of this section), will be regarded as compliance with subsection (4) of this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of subsection (4) of this section, may be evidence justifying modification, revocation, or reissuance of a permit under WAC 173-303-830.

(5) Trial burns and permit modifications.

(a) The owner or operator of a dangerous waste incinerator may burn only wastes specified in his permit and only under operating conditions specified for those wastes under subsection (6) of this section, except:

(i) In approved trial burns under WAC 173-303-807; or

(ii) Under exemptions created by WAC 173-303-670(1).

(b) New dangerous wastes may be burned only after operating conditions have been specified in a trial burn permit or a permit modification has been issued, as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with Part B of a permit application under WAC 173-303-806(4).

(c) The permit for a new dangerous waste incinerator must establish appropriate conditions for each of the applicable requirements of this section, including but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of subsection (6) of this section, sufficient to comply with the following standards:

(i) For the period beginning with initial introduction of dangerous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish operating conditions required in (c)(ii) of this subsection, not to exceed a duration of seven hundred twenty hours operating time for treatment of dangerous waste. The operating requirements must be those most likely to ensure compliance with the performance standards of subsection (4) of this section, based on the department's engineering judgment. The department may extend the duration of this period once for up to seven hundred twenty additional hours when good cause for the extension is demonstrated by the applicant;

(ii) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the performance standards of subsection (4) of this section, and must be in accordance with the approved trial burn plan;

(iii) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the department, the operating requirements must be those most likely to ensure compliance with the performance standards of subsection (4) of this section, based on the department's engineering judgment;

(iv) For the remaining duration of the permit, the operating requirements must be those demonstrated, in a trial burn or by alternative data specified in WAC 173-303-806 (4)(f)(iii)(G), as sufficient to ensure compliance with the performance standards of subsection (4) of this section.

(6) Operating requirements.

(a) An incinerator must be operated in accordance with operating requirements specified in the permit. These will be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in subsection (5)(b) of this section and included with Part B of a facility's permit application) to be sufficient to comply with the performance standards of subsection (4) of this section.

(b) Each set of operating requirements will specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed which will not affect compliance with the performance requirement of subsection (4) of this section) to which the operating requirements apply. For each such waste feed, the permit will specify acceptable operating limits including the following conditions:

(i) Carbon monoxide (CO) level in the stack exhaust gas;

(ii) Waste feed rate;

(iii) Combustion temperature;

(iv) An appropriate indicator of combustion gas velocity;

(v) Allowable variations in incinerator system design or operating procedures; and

(vi) Such other operating requirements as are necessary to ensure that the performance standards of subsection (4) of this section are met.

(c) During startup and shutdown of an incinerator, dangerous waste (except waste exempted in accordance with subsection (1)(b) of this section) must not be fed into the incinerator unless the incinerator is operating within the conditions of operation (temperature, air feed rate, etc.) specified in the permit.

(d) Fugitive emissions from the combustion zone must be controlled by:

(i) Keeping the combustion zone totally sealed against fugitive emissions;

(ii) Maintaining a combustion zone pressure lower than atmospheric pressure; or

(iii) An alternate means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(e) An incinerator must be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under (a) of this subsection.

(f) An incinerator must cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

(7) Monitoring and inspections.

(a) The owner or operator must conduct, as a minimum, the following monitoring while incinerating dangerous waste:

(i) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit must be monitored on a continuous basis;

(ii) Carbon monoxide (CO) must be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere; and

(iii) As required by the department, sampling and analysis of the waste and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the performance standards of subsection (4) of this section.

(b) The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be completely inspected at least daily for leaks, spills, fugitive emissions, and signs of tampering. All emergency waste feed cutoff controls and system alarms must be tested at least weekly to verify proper operation, unless the owner or operator demonstrates to the department that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, emergency cutoff and alarm systems must be tested at least monthly.

(c) This monitoring and inspection data must be recorded and the records must be placed in the operating log required by WAC 173-303-380(1).

(8) Closure. At closure the owner or operator must remove all dangerous waste and dangerous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the incinerator site. Remaining equipment, bases, liners, soil, and debris containing or contaminated with dangerous waste or waste residues must be decontaminated or removed.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-670, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-670, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-670, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-670, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-670, filed 2/10/82.]

WAC 173-303-675 Drip pads. (1) Applicability.

(a) The requirements of this section apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water run-off to an associated collection system. Existing drip pads are those constructed before December 6, 1990, and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads. The requirement in subsection (4)(b)(iii) of this section to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992, except for those constructed after December 24, 1992, for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 24, 1992.

(b) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither run-off nor run-on is generated is not subject to regulation under subsection (4)(e) or (f) of this section, as appropriate.

(c) The requirements of this section are not applicable to the management of infrequent and incidental drippage in storage yards provided that: The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage. At a minimum, the contingency plan must describe how the owner or operator will do the following:

(i) Clean up the drippage;

(ii) Document the cleanup of the drippage;

(iii) Retain documents regarding cleanup for three years; and

(iv) Manage the contaminated media in a manner consistent with federal regulations.

(2) Assessment of existing drip pad integrity.

(a) For each existing drip pad as defined in subsection (1) of this section, the owner or operator must evaluate the drip pad and determine that it meets all of the requirements of this section, except the requirements for liners and leak detection systems of subsection (4)(b) of this section. No later than the effective date of this rule, the owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all of the standards of subsection (4) of this section are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of subsection (4) of this section, except the standards for liners and leak detection systems, specified in subsection (4)(b) of this section.

(b) The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of subsection (4)(b) of this section, and submit the plan to the department no later than two years before the date that all repairs, upgrades, and modifications are complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of subsection (4) of this section. The plan must be reviewed and certified by an independent qualified registered professional engineer.

(c) Upon completion of all upgrades, repairs, and modifications, the owner or operator must submit to the department, the as-built drawings for the drip pad together with a certification by an independent qualified registered professional engineer attesting that the drip pad conforms to the drawings.

(d) If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of subsection (4)(m) of this section or close the drip pad in accordance with subsection (6) of this section.

(3) Design and installation of new drip pads.

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with one of the following:

(a) All of the requirements of subsections (4) of this section (except subsection (4)(a)(iv)), (5) and (6) of this section; or

(b) All of the requirements of subsections (4) of this section (except subsection (4)(b)), (5) and (6) of this section.

(4) Design and operating requirements.

(a) Drip pads must:

(i) Be constructed of nonearthen materials, excluding wood and nonstructurally supported asphalt:

(ii) Be sloped to free-drain treated wood drippage, rain and other waters, or solutions of drippage and water or other wastes to the associated collection system;

(iii) Have a curb or berm around the perimeter;

(iv)(A) Have a hydraulic conductivity of less than or equal to 1 x 10^{-7} centimeters per second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1 x 10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with subsection (3)(a) of this section instead of subsection (3)(b) of this section.

(B) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this subsection, except for (b) of this subsection.

(v) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

Note: The department will generally consider applicable standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) or the American Society of Testing and Materials (ASTM) in judging the structural integrity requirement of this subsection.

(b) If an owner/operator elects to comply with subsection (3)(b) of this section instead of subsection (3)(a) of this section, the drip pad must have:

(i) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases 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 drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

(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 that could come in contact with the waste or leakage; and

(ii) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and

(II) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad;

(B) Designed and operated to function without clogging through the scheduled closure of the drip pad; and

(C) Designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.

(iii) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.

(c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.

Note: See subsection (4)(m) of this section for remedial action required if deterioration or leakage is detected.

(d) The drip pad and associated collection system must be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.

(e) Unless protected by a structure, as described in subsection (1)(b) of this section, the owner or operator must design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a twenty-four-hour, twenty-five-year storm, unless the system has sufficient excess capacity to contain any run-off that might enter the system.

(f) Unless protected by a structure or cover as described in subsection (1)(b) of this section, 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) The drip pad must be evaluated to determine that it meets the requirements of (a) through (f) of this subsection and the owner or operator must obtain a statement from an independent, qualified registered professional engineer certifying that the drip pad design meets the requirements of this section.

(h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.

(i) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log. The owner/operator must determine if the residues are dangerous under WAC 173-303-070 and, if so, must manage them under this chapter.

(j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

(k) After being removed from the treatment vessel, treated wood from pressure and nonpressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the drip pad following treatment in accordance with this requirement.

(l) Collection and holding units associated with run-on and run-off control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

(m) Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

(i) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must:

(A) Enter a record of the discovery in the facility operating log;

(B) Immediately remove the portion of the drip pad affected by the condition from service;

(C) Determine what steps must be taken to repair the drip pad and clean up any leakage from below the drip pad, and establish a schedule for accomplishing the repairs;

(D) Within twenty-four hours after discovery of the condition, notify the department of the condition and, within ten working days, provide written notice to the department with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.

(ii) The department will review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete and notify the owner or operator of the determination and the underlying rationale in writing.

(iii) Upon completing all repairs and clean up, the owner or operator must notify the department in writing and provide a certification signed by an independent, qualified registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with (m)(i)(D) of this subsection.

(n) Should a permit be necessary, 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.

(o) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of

preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

(5) Inspections.

(a) During construction or installation, liners 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, liners must be inspected and certified as meeting the requirements of subsection (4) of this section by an independent qualified, registered professional engineer. This certification must be maintained at the facility as part of the facility operating record. After installation, liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

(b) While a drip pad 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 leakage in and proper functioning of leak detection system;

(iii) Deterioration or cracking of the drip pad surface.

Note: See subsection (4)(m) of this section for remedial action required if deterioration or leakage is detected.

(6) Closure.

(a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect 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 practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with closure and post-closure care requirements that apply to landfills (WAC 173-303-665(6)). For permitted units, the requirement to have a permit continues throughout the post-closure period. In addition, for the purpose of closure, post-closure, and financial responsibility, such a drip pad is then considered to be landfill, and the owner or operator must meet all of the requirements for landfills specified in WAC 173-303-610 and 173-303-620.

(c)(i) The owner or operator of an existing drip pad, as defined in subsection (1) of this section, that does not comply with the liner requirements of subsection (4)(b)(i) of this section must:

(A) Include in the closure plan for the drip pad 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 practicably removed at closure; and

(B) 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 173-303-610 and 173-303-620 for closure and post-closure care of a drip pad subject to 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) of this subsection.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-675, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-675, filed 10/19/95, effective 11/19/95.]

WAC 173-303-680 Miscellaneous units. (1) Applicability. The requirements of this section apply to owners and operators of facilities that treat, store, or dispose of dangerous waste in miscellaneous units, except as WAC 173-303-600 provides otherwise.

(2) Environmental performance standards. A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as necessary to protect human health and the environment, including, but not limited to, as appropriate, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of dangerous waste or dangerous constituents from the unit. Permit terms and provisions will include those requirements in WAC 173-303-630 through 173-303-670, 40 CFR Subparts AA through CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692, WAC 173-303-800 through 173-303-806, and 40 CFR Part 146 that are appropriate for the miscellaneous units being permitted. Protection of human health and the environment includes, but is not limited to:

(a) Prevention of any releases that may have adverse effects on human health or the environment due to migration of wastes constituents in the ground water or subsurface environment, considering:

(i) The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;

(ii) The hydrologic and geologic characteristics of the unit and the surrounding area;

(iii) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water;

(iv) The quantity and direction of ground water flow;

(v) The proximity to and withdrawal rates of current and potential ground water users;

(vi) The patterns of land use in the region;

(vii) The potential for deposition or migration of waste constituents into subsurface physical structures, and into the root zone of food-chain crops and other vegetation;

(viii) The potential for health risks caused by human exposure to waste constituents; and

(ix) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(b) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, or wetlands or on the soil surface considering:

(i) The volume and physical and chemical characteristics of the waste in the unit;

(ii) The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

(iii) The hydrologic characteristics of the unit and the surrounding area, including the topography of the land around the unit;

(iv) The patterns of precipitation in the region;

(v) The quantity, quality, and direction of ground water flow;

(vi) The proximity of the unit to surface waters;

(vii) The current and potential uses of nearby surface waters and any water quality standards established for those surface waters;

(viii) The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;

(ix) The patterns of land use in the region;

(x) The potential for health risks caused by human exposure to waste constituents; and

(xi) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(c) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering:

(i) The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols and particulates;

(ii) The effectiveness and reliability of systems and structures to reduce or prevent emissions of dangerous constituents to the air;

(iii) The operating characteristics of the unit;

(iv) The atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area;

(v) The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

(vi) The potential for health risks caused by human exposure to waste constituents; and

(vii) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(3) Monitoring, analysis, inspection, response, reporting, and corrective action. Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies must ensure compliance with subsection (2) of this section, WAC 173-303-320, 173-303-340(1), 173-303-390, and 173-303-646(2) as well as meet any additional requirements needed to protect human health and the environment as specified in the permit.

(4) Post-closure care. A miscellaneous unit that is a disposal unit must be maintained in a manner that complied with subsection (2) of this section during the post-closure care period. In addition, if a treatment or storage unit has contaminated soils or ground water that cannot be completely removed or decontaminated during closure, then that unit must also meet the requirements of subsection (2) of this section during post-closure care. The post-closure plan under WAC 173-303-610(8) must specify the procedures that will be used to satisfy this requirement.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-680, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-680, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-680, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-680, filed 3/7/91, effective 4/7/91.]

WAC 173-303-690 Air emission standards for process vents. (1) Applicability.

(a) The regulations in this section apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes.

(b) Except for 40 CFR 264.1034(d) and (e), this section applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in one of the following:

(i) A unit that is subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(ii) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of WAC 173-303-200(1) (i.e., a hazardous waste recycling unit that is not a ninety-day tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(iii) A unit that is exempt from permitting under the provisions of WAC 173-303-200(1) (i.e., a "ninety-day" tank or container) and is not a recycling unit under the provisions of WAC 173-303-120.

(c) For the owner and operator of a facility subject to this section and who received a final hazardous waste permit prior to December 6, 1996, the requirements of this section must be incorporated into the permit when the permit is reissued in accordance with the requirements of WAC 173-303-840(8) or reviewed in accordance with the requirements of WAC 173-303-806(11). Until such date when the owner and operator receives a final permit incorporating the requirements of this section, the owner and operator is subject to the requirements of 40 CFR Subpart AA.

Note: The requirements of 40 CFR Parts 264.1032 through 264.1036 apply to process vents on hazardous waste recycling units previously exempt under WAC 173-303-120 (4)(d). Other exemptions under WAC 173-303-071 and 173-303-600(2) are not affected by these requirements.

(d) The requirements of this section do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to this section are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR Part 60, Part 61, or Part 63. The documentation of compliance under regulations at 40 CFR Part 60, Part 61, or Part 63 must be kept with, or made readily available with, the facility operating record.

(2) 40 CFR 264.1031 through 1036 (Subpart AA) is incorporated by reference.

Note: Where the incorporated language refers to 264.1030, refer to subsection (1) of this section. Where the incorporated language refers to Part 270, refer to WAC 173-303-800 through 173-303-840.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-690, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-690, filed 10/19/95, effective 11/19/95.]

WAC 173-303-691 Air emission standards for equipment leaks. (1) Applicability.

(a) The regulations in this section apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes.

(b) Except as provided in 40 CFR 1064(k), this section applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following:

(i) A unit that is subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(ii) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of WAC 173-303-200(1) (i.e., a hazardous waste recycling unit that is not a "ninety-day" tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(iii) A unit that is exempt from permitting under the provisions of WAC 173-303-200(1) (i.e., a "ninety-day" tank or container) and is not a recycling unit under the provisions of WAC 173-303-120.

(c) If the owner or operator of equipment subject to the requirements of 40 CFR 264.1052 through 264.1065 has received a permit under section 3005 of RCRA prior to December 21, 1990, the requirements of 40 CFR 264.1052 through 264.1065 must be incorporated when the permit is reissued under WAC 173-303-840(8) or reviewed under WAC 173-303-806(11).

(d) Each piece of equipment to which this section applies must be marked in such a manner that it can be distinguished readily from other pieces of equipment.

(e) Equipment that is in vacuum service is excluded from the requirements of 40 CFR 264.1052 to 264.1060 if it is identified as required in 40 CFR 264.1064 (g)(5).

(f) Equipment that contains or contacts hazardous waste with an organic concentration of at least ten percent by weight for less than three hundred hours per calendar year is excluded from the requirements of 40 CFR Parts 264.1052 through 264.1060 if it is identified, as required in 40 CFR Part 264.1064 (g)(6).

Note: The requirements of 40 CFR Parts 264.1052 through 264.1065 apply to equipment associated with hazardous waste recycling units previously exempt under WAC 173-303-120 (4)(d). Other exemptions under WAC 173-303-071 and 173-303-600(2) are not affected by these requirements.

(2) 40 CFR 264.1051 through 1065 (Subpart BB) is incorporated by reference.

Note: Where the incorporated language refers to 264.1050, refer to WAC 173-303-691. Where the incorporated language refers to Part 270, refer to WAC 173-303-800 through 173-303-840.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-691, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-691, filed 10/19/95, effective 11/19/95.]

WAC 173-303-692 Air emission standards for tanks, surface impoundments, and containers. (1) **Applicability.**

(a) The requirements of 40 CFR Part 264 Subpart CC apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to either WAC 173-303-630, 173-303-640, or 173-303-650 except as WAC 173-303-600 and (b) of this subsection provide otherwise.

(b) The requirements of 40 CFR Part 264 Subpart CC do not apply to the following waste management units at the facility:

(i) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.

(ii) A container that has a design capacity less than or equal to 0.1 m^3.

(iii) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

(iv) A surface impoundment in which an owner or operator has stopped adding hazardous waste (except to implement an approved closure plan) and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

(v) A waste management unit that is used solely for on-site treatment or storage of hazardous waste that is placed in the unit as a result of implementing remedial activities required under the corrective action authorities of WAC 173-303-646, or RCRA section 3008(h), or CERCLA authorities.

(vi) A waste management unit that is used solely for the management of radioactive mixed waste in accordance with all applicable regulations under the authority of the Atomic Energy Act and the Nuclear Waste Policy Act.

(vii) A hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR Parts 60, 61, or 63. For the purpose of complying with this paragraph, a tank for which the air emission control includes an enclosure, as opposed to a cover, must be in compliance with the enclosure and control device requirements of 40 CFR Part 264.1084(i), except as provided in 40 CFR Part 264.1082 (c)(5).

(viii) A tank that has a process vent as defined in 40 CFR Part 264.1031.

(c) For the owner and operator of a facility subject to this section who received a final permit under the Hazardous Waste Management Act prior to December 6, 1996, the requirements of 40 CFR Part 264 Subpart CC will be incorporated into the permit when the permit is reissued in accordance with the requirements of WAC 173-303-840(8) or reviewed in accordance with the requirements of WAC 173-303-806 (11)(d). Until such date when the permit is reissued in accordance with the requirements of WAC 173-303-

840(8) or reviewed in accordance with the requirements of WAC 173-303-806 (11)(d), the owner and operator is subject to the requirements of 40 CFR Part 265 Subpart CC, which is incorporated by reference at WAC 173-303-400 (3)(a).

(d) The requirements of 40 CFR Part 264 Subpart CC, except for the recordkeeping requirements specified in 40 CFR Part 264.1089(i), are administratively stayed for a tank or a container used for the management of hazardous waste generated by organic peroxide manufacturing and its associated laboratory operations when the owner or operator of the unit meets all of the following conditions:

(i) The owner or operator identifies that the tank or container receives hazardous waste generated by an organic peroxide manufacturing process producing more than one functional family of organic peroxides or multiple organic peroxides within one functional family, that one or more of these organic peroxides could potentially undergo self-accelerating thermal decomposition at or below ambient temperatures, and that organic peroxides are the predominant products manufactured by the process. For the purpose of meeting the conditions of this paragraph, "organic peroxide" means an organic compound that contains the bivalent —O—O— structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

(ii) The owner or operator prepares documentation, in accordance with the requirements of 40 CFR Part 264.1089(i) explaining why an undue safety hazard would be created if air emission controls specified in 40 CFR Parts 264.1084 through 264.1087 are installed and operated on the tanks and containers used at the facility to manage the hazardous waste generated by the organic peroxide manufacturing process or processes meeting the conditions of (d)(i) of this subsection.

(iii) The owner or operator notifies the department in writing that hazardous waste generated by an organic peroxide manufacturing process or processes meeting the conditions of (d)(i) of this subsection are managed at the facility in tanks or containers meeting the conditions of (d)(ii) of this subsection. The notification must state the name and address of the facility, and must be signed and dated by an authorized representative of the facility owner or operator.

(2) **40 CFR Parts 264.1081 through 264.1091 (Subpart CC) is incorporated by reference.**

Note: Where the incorporated language refers to 264.1050, refer to WAC 173-303-691. Where the incorporated language refers to Part 270, refer to WAC 173-303-800 through 173-303-840.

(3) **References within 40 CFR Part 264 Subpart CC to the following parts are incorporated by reference:** 40 CFR Parts 60, 61, and 63. This includes Method 25E - Determination of Vapor Phase Organic Concentration in Waste Samples at 40 CFR Part 60 Appendix A.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-692, filed 5/10/00, effective 6/10/00.]

WAC 173-303-693 Dangerous waste munitions and explosives storage. (1) Applicability. The requirements of this section apply to owners or operators who store munitions and explosive dangerous wastes, except as WAC 173-303-600(3) provides otherwise. (NOTE: Depending on explosive hazards, dangerous waste munitions and explosives may also be managed in other types of storage units, including containment buildings (WAC 173-303-695), tanks (WAC 173-303-640), or containers (WAC 173-303-630). See WAC 173-303-578(4) for storage of waste military munitions.)

(2) **Design and operating standards.**

(a) Dangerous waste munitions and explosives storage units must be designed and operated with containment systems, controls, and monitoring, that:

(i) Minimize the potential for detonation or other means of release of dangerous waste, dangerous constituents, dangerous decomposition products, or contaminated run-off, to the soil, ground water, surface water, and atmosphere;

(ii) Provide a primary barrier, which may be a container (including a shell) or tank, designed to contain the dangerous waste;

(iii) For wastes stored outdoors, provide that the waste and containers will not be in standing precipitation;

(iv) For liquid wastes, provide a secondary containment system that assures that any released liquids are contained and promptly detected and removed from the waste area, or vapor detection system that assures that any released liquids or vapors are promptly detected and an appropriate response taken (for example, additional containment, such as overpacking, or removal from the waste area); and

(v) Provide monitoring and inspection procedures that assure the controls and containment systems are working as designed and that releases that may adversely impact human health or the environment are not escaping from the unit.

(b) Dangerous waste munitions and explosives stored in accordance with this section may be stored in one of the following:

(i) Earth-covered magazines. Earth-covered magazines must be:

(A) Constructed of waterproofed, reinforced concrete or structural steel arches, with steel doors that are kept closed when not being accessed;

(B) Designed and constructed:

(I) To be of sufficient strength and thickness to support the weight of any explosives or munitions stored and any equipment used in the unit;

(II) To provide working space for personnel and equipment in the unit; and

(III) To withstand movement activities that occur in the unit; and

(C) Located and designed, with walls and earthen covers that direct an explosion in the unit in a safe direction, so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.

(ii) Above-ground magazines. Above-ground magazines must be located and designed so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.

(iii) Outdoor or open storage areas. Outdoor or open storage areas must be located and designed so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.

(c) Dangerous waste munitions and explosives must be stored in accordance with a standard operating procedure specifying procedures to ensure safety, security, and environ-

mental protection. If these procedures serve the same purpose as the security and inspection requirements of WAC 173-303-310, the preparedness and prevention procedures of WAC 173-303-340, and the contingency plan and emergency procedures requirements of WAC 173-303-350, then these procedures will be used to fulfill those requirements.

(d) Dangerous waste munitions and explosives must be packaged to ensure safety in handling and storage.

(e) Dangerous waste munitions and explosives must be inventoried at least annually.

(f) Dangerous waste munitions and explosives and their storage units must be inspected and monitored as necessary to ensure explosives safety and to ensure that there is no migration of contaminants out of the unit.

(3) **Closure and post-closure care.**

(a) At closure of a magazine or unit that stored dangerous waste in accordance with this section, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components, contaminated subsoils, and structures and equipment contaminated with waste, and manage them as dangerous waste. The closure plan, closure activities, cost estimates for closure, and financial responsibility for magazines or units must meet all of the requirements specified in WAC 173-303-610 and 173-303-620, except that the owner or operator may defer closure of the unit as long as it remains in service as a munitions or explosives magazine or storage unit.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect 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 practicably removed or decontaminated, he or she must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (WAC 173-303-665(6)).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-693, filed 5/10/00, effective 6/10/00.]

WAC 173-303-695 Containment buildings. The requirements for containment buildings at 40 CFR Part 264 Subpart DD are incorporated by reference. The words "regional administrator" will mean "department."

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-695, filed 10/19/95, effective 11/19/95.]

WAC 173-303-700 Requirements for the Washington state extremely hazardous waste management facility at Hanford. (1) Purpose and applicability. The purpose of this section is to set forth the requirements for the Washington EHW management (EHWM) facility located at Hanford, Washington. It is the only facility within the state that is allowed under law to dispose of EHW (RCW 70.105.050).

(2) Waste acceptance at Hanford.

(a) The state operator will accept EHW for treatment, storage, or disposal when:

(i) The waste has been specified in the state operator's permit as not requiring prior approval from the department and the state operator sends a copy of each written request for disposal of waste at the EHWM facility to the department, not later than one week after receiving the request; or

(ii) If the waste has not been specified in the state operator's permit, then the department provides written approval that the waste may be accepted at the EHWM facility. Notices of approval or disapproval will be provided as soon as possible, but not later than 15 days, after the state operator has notified the department. Written approval from the department is not required in emergencies, as specified; and

(iii) The generator has obtained prior written approval for waste acceptance from the state operator;

(iv) The waste is accompanied by a manifest specified in the generator requirements of WAC 173-303-180, Manifest; and

(v) Waste containers meet the labeling and container condition requirements of WAC 173-303-190.

(b) The state operator may accept DW, as defined in this regulation, for storage, treatment, or disposal when:

(i) All the conditions of EHW acceptance, (a) of this subsection, are met;

(ii) The generator and/or operator shows that no other permitted TSD facility in the state will handle such DW. The generator and/or operator must refer to:

(A) County or municipal ordinances or solid waste permits forbidding DW disposal at nearby sites;

(B) The EHWM site being the shortest economical haul distance where other remotely located, DW sites may be available; and

(C) Specific rejection or disapproval, in writing, by nearby DW site operators, public or private; and

(iii) The EHWM facility is designed to handle such a request or can be modified to the extent necessary to adequately dispose of the waste.

(c) The state operator, after consulting with the department, may refuse to accept any waste that does not meet the requirements of the acceptance procedures of this subsection until the facts are ascertained, including but not limited to:

(i) The requirement that samples of waste be taken and analyzed; or

(ii) The condition of the containers by physical inspection of the delivery load.

(d) The state operator may accept dangerous waste under emergency conditions if:

(i) An emergency and potential threat to the public health and safety exists;

(ii) The state operator notifies the department as soon as possible;

(iii) The state operator stores the waste upon delivery until the full manifest has been received and approved by the department; and

(iv) The generator is fully apprised that the waste remains his liability until approved under (d)(iii) of this subsection.

(3) Other applicable requirements. The EHWM facility at Hanford must meet all other requirements of chapter 173-303 WAC, including specific requirements for storage, treatment, transfer and disposal of EHW, and siting, performance, and operation of facilities. The EHWM facility must also meet the following requirements:

(a) The state operator must not remove any dangerous waste from the facility without the department's approval;

(b) The state operator must maintain facilities for telephone and radio contact with the Hanford Reservation security patrol, and include this information with the contingency plan required in WAC 173-303-350;

(c) As a minimum, the state operator must provide personnel having knowledge and background in the following areas:

(i) Inspecting and checking manifests for completeness and accuracy;

(ii) Applied chemistry as it relates to reactivity, explosiveness, and flammability; and

(iii) Industrial hygiene and/or toxicology of industrial, commercial, and agricultural chemicals, and emergency procedures;

(d) The state operator must ensure that new personnel have a complete physical examination and annual checkups thereafter. The physician should be alerted to the kinds of materials the employee has been handling, so that more specific analyses can be made. The medical records must be made a part of the state operator's records as required in WAC 173-303-380(1); and

(e) The state operator must submit copies of all fee schedules to the department for yearly review and approval. The state operator must supply, and the department will use, the following criteria to review such disposal fees:

(i) Their relationship to other fees charged for similar services;

(ii) Reasonable return on investment and profit for the operator; and

(iii) The cost of administration, development, operation, maintenance, and perpetual management of the EHW facility, including administrative costs and perpetual management costs of the department.

(4) Department surveillance.

(a) In addition to the reports required under WAC 173-303-390, facility reports, the EHWM facility operator must report the following to the department:

(i) Copies of all environmental sampling results during the previous quarter;

(ii) Telephone and written accounts of any accidents or emergencies requiring action under WAC 173-303-360; and

(iii) Complete financial reports during the previous year.

(b) The state operator must admit the department's duly authorized representative to inspect the site at any reasonable hour of the day. Inspection may cover any of the following:

(i) The site and facilities;

(ii) The waste being delivered, stored, processed, or buried, including the taking of samples, a portion of each sample being given to the operator upon his request;

(iii) The environment, by the drilling of test wells and obtaining of samples; and

(iv) Any records, reports, information, or test results relating to the purpose of this regulation.

The inspection results will be written, filed with the department, and a copy made available to the state operator.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-700, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-700, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-700, filed 2/10/82.]

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 must, when required by this chapter, obtain a permit in accordance with WAC 173-303-800 through 173-303-840 covering the active life, closure period, ground water protection compliance period, and for any regulated unit (as defined in WAC 173-303-040) or 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, unless they demonstrate closure by removal or decontamination as provided under WAC 173-303-800 (9) and (10). If a post-closure permit is required, the permit must address applicable ground water monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements of this chapter. The denial of a permit for the active life of a dangerous waste management facility or unit does not affect the requirement to obtain a post-closure permit under this section.

(3) TSD facility permits will be granted only if the objectives of the siting and performance standards set forth in WAC 173-303-282 and 173-303-283 are met.

(4) Permits will 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 have the same meanings as set forth in 40 CFR 270.2.

(7) Exemptions.

(a) A permit for an on-site cleanup action may be exempted as provided in a consent decree or order signed by the department and issued pursuant to chapter 70.105D RCW.

(b) A permit is not required for an on-site cleanup action performed by the department pursuant to chapter 70.105D RCW.

(c) Further exemptions.

(i) A person is not required to obtain a dangerous waste permit for treatment or containment activities taken during immediate response to any of the following situations:

(A) A discharge of a dangerous waste;

(B) An imminent and substantial threat of a discharge of dangerous waste;

(C) A discharge of a material that, when discharged, becomes a dangerous waste;

(D) An immediate threat to human health, public safety, property, or the environment from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or muni-

tions emergency response specialist as defined in WAC 173-303-040.

(E) In the case of emergency responses involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

(ii) Any person who continues or initiates dangerous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(iii) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) handling the wastes listed below are not required to obtain a dangerous waste permit. These handlers are subject to regulation under WAC 173-303-573, when handling the below listed universal wastes.

(A) Batteries as described in WAC 173-303-573(2);

(B) Thermostats as described in WAC 173-303-573(3); and

(C) Lamps as described in WAC 173-303-573(5).

(8) Each permit issued under this chapter will contain terms and conditions as the department determines necessary to protect human health and the environment.

(9) Closure by removal. Owners/operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under 40 CFR Part 265 standards as referenced by WAC 173-303-400 must obtain a post-closure permit unless they can demonstrate to the department that the closure met the standards for closure by removal or decontamination in WAC 173-303-650(6), 173-303-655(8), or 173-303-660(9), as appropriate, and such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed standards for closure at 40 CFR Part 264.111, as appropriate. The demonstration may be made in the following ways:

(a) If the owner/operator has submitted a Part B application for a post-closure permit, the owner/operator may request a determination, based on information contained in the application, that 40 CFR Part 264.111 standards for closure by removal were met. If the department believes that 40 CFR Part 264.111 standards were met, the department will notify the public of this proposed decision, allow for public comment, and reach a final determination according to the procedures in subsection (10) of this section.

(b) If the owner/operator has not submitted a Part B application for a post-closure permit, the owner/operator may petition the department for a determination that a post-closure permit is not required because the closure met the applicable 40 CFR Part 264.111 closure standards.

(i) The petition must include data demonstrating that standards for closure by removal or decontamination were met, or it must demonstrate that the unit closed under chapter 173-303 WAC requirements that met or exceeded the applicable 40 CFR Part 264.111 closure-by-removal standard.

(ii) The department will approve or deny the petition according to the procedures outline in subsection (10) of this section.

(10) Procedures for closure equivalency determination.

(a) If a facility owner/operator seeks an equivalency demonstration under subsection (9) of this section, the department will provide the public, through a newspaper notice, the opportunity to submit written comments on the information submitted by the owner/operator within thirty days from the date of the notice. The department will also, in response to a request or at the discretion of the department, hold a public hearing whenever such a hearing might clarify one or more issues concerning the equivalence of the 40 CFR Part 265 closure, as referenced by WAC 173-303-400, to a 40 CFR Part 264.111 closure. The department will give public notice of the hearing at least thirty days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.)

(b) The department will determine whether the 40 CFR Part 265 closure met 40 CFR Part 264.111 closure by removal or decontamination requirements within ninety days of its receipt. If the department finds that the closure did not meet the applicable 40 CFR Part 264.111 standards, the department will provide the owner/operator with a written statement of the reasons why the closure failed to meet 40 CFR Part 264.111 standards. The owner/operator may submit additional information in support of an equivalency demonstration within thirty days after receiving such written statement. The department will review any additional information submitted and make a final determination within sixty days.

(c) If the department determines that the facility did not close in accordance with 40 CFR Part 264.111 standards for closure by removal, the facility is subject to post-closure permitting requirements.

(11) The department may require a permittee or an applicant to submit information in order to establish permit conditions under subsection (8) of this section and WAC 173-303-806 (11)(d).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-800, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-800, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-800, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-800, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-800, filed 3/7/91, effective 4/7/91. 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

(d) Totally enclosed treatment facilities and elementary neutralization and wastewater treatment units - See WAC 173-303-802(5).

(2) Emergency permits - See WAC 173-303-804.

(3) Interim status permits - See WAC 173-303-805.

(4) Final facility permits:

(a) Final status TSD permits - See WAC 173-303-806; and

(b) Recycling permits - See WAC 173-303-806.

(5) Trial burns for dangerous waste incinerator final facility permits - See WAC 173-303-807.

(6) Demonstrations for dangerous waste land treatment final facility permits - See WAC 173-303-808.

(7) Research, development, and demonstration permits - See WAC 173-303-809.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-801, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-801, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-801, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-801, filed 2/10/82.]

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, will 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.);

(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;

(ii) WAC 173-303-170 through 173-303-230 when initiating shipments of dangerous waste;

(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 report.

(3) Underground injection wells. Underground injection wells with an underground injection control (UIC) permit for underground injection will have a permit by rule if the owner or operator has a UIC permit issued by the department under a federally approved program for underground injection control, and complies with the conditions of the permit and requirements of 40 CFR 144.14 and applicable state waste discharge rules. For UIC permits issued after November 8, 1984, the owner or operator must comply with WAC 173-303-646(2), corrective action for solid waste management units; and where the UIC well is the only unit at a facility which requires a RCRA permit, complies with WAC 173-303-806 (4)(a)(xxiii). All underground injection wells must comply with WAC 173-303-060, notification and identification numbers. However, underground injection wells disposing of EHW are prohibited.

(4) Publicly owned treatment works (POTW). The owner or operator of a POTW which accepts dangerous waste for treatment, will have a permit by rule if the owner or operator:

(a) Has a National Pollutant Discharge Elimination System (NPDES) permit;

(b) Complies with the conditions of that permit;

(c) Complies with the following regulations:

(i) WAC 173-303-060, notification and identification numbers;

(ii) WAC 173-303-170 through 173-303-230 when initiating shipments of dangerous waste;

(iii) WAC 173-303-283, performance standards;

(iv) WAC 173-303-370, manifest system;

(v) WAC 173-303-380 (1)(a), operating record;

(vi) WAC 173-303-390(2), annual report;

(vii) WAC 173-303-390(1), unmanifested waste reports; and

(viii) For NPDES permits issued after November 8, 1984, WAC 173-303-646(2), corrective action for solid waste management units;

(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 that treats state-only dangerous wastes generated on or off site, or federally regulated hazardous wastes generated on site will have a permit by rule, except as provided in (c) of this subsection, if they:

(i) Have an NPDES permit, state waste discharge permit, pretreatment permit (or written discharge authorization from the local sewerage authority) issued by the department, or pretreatment permit (or written discharge authorization) from a local sewage utility delegated pretreatment program responsibilities pursuant to RCW 90.48.165, and the permit or authorization covers the waste stream and constituents being discharged;

(ii) Comply with the conditions of that permit;

(iii) Comply with the following regulations:

(A) WAC 173-303-060, notification and identification numbers;

(B) WAC 173-303-070, designation of dangerous waste;

(C) WAC 173-303-283, performance standards;

(D) WAC 173-303-300, general waste analysis;

(E) WAC 173-303-310, security;

(F) WAC 173-303-350, contingency plan and emergency procedures;

(G) WAC 173-303-360, emergencies;

(H) WAC 173-303-370, manifest system;

(I) WAC 173-303-380 (1)(d), operating record;

(J) WAC 173-303-390, facility reporting.

(b) The owner or operator of a wastewater treatment unit that treats federally regulated hazardous wastes received from off site will have a permit by rule, except as provided in (c) of this subsection, if:

(i) The facility has received a permit (or interim status) for treatment, storage, or disposal of hazardous wastes in accordance with WAC 173-303-800, 173-303-801, and 173-303-804 through 173-303-840; and

(ii) The owner or operator complies with (a)(i) through (iii) 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 (a) or (b) of this subsection to apply for and obtain a final facility permit or a permit modification 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.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-802, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-802, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-802, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-802, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-802, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-802, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-802, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-802, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-802, filed 4/18/84.]

WAC 173-303-803 Permit application requirements. (1) **Applicability.** The requirements in this section apply to both interim and final status facilities. In addition to this section, the applicable provisions of WAC 173-303-800, 173-303-805, and 173-303-806 must be followed. Persons currently authorized with interim status must apply for permits when required by the department (see requirements at WAC 173-303-806).

(2) **Existing dangerous waste management facilities and interim status qualifications.**

(a) Owners and operators of existing dangerous waste management facilities or of dangerous waste management facilities in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act and RCRA that render the facility subject to the requirement to have a dangerous waste permit must submit part A of their permit application no later than:

(i) Six months after the date of publication of regulations that first require them to comply with the standards set forth in WAC 173-303-400, 173-303-505, 173-303-520, or 173-303-525, or 40 CFR Part 266 Subpart H; or

(ii) Thirty days after the date they first become subject to the standards set forth in WAC 173-303-400, 173-303-505, 173-303-520, or 173-303-525, or 40 CFR Part 266 Subpart H 40 CFR, whichever first occurs;

(iii) For generators generating greater than 220 pounds but less than 2200 pounds of dangerous waste in a calendar month and treats, stores, or disposes of these wastes on-site, by March 24, 1987.

(b) The owner or operator of an existing dangerous waste management facility may be required to submit part B of their permit application. The department may require submission of part B if the department has received interim or final authorization; if not, the EPA Regional Administrator may require submission of part B. Any owner or operator will be allowed at least six months from the date of request to submit part B of the application. Any owner or operator of an existing dangerous waste management facility may voluntarily submit part B of the application at any time. Notwithstanding the above, any owner or operator of an existing dangerous waste management facility must submit a part B permit application in accordance with the dates specified in WAC 173-303-805(8). Any owner or operator of a land disposal facility in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act or RCRA that render the facility subject to the requirement to have an RCRA permit must submit a part B application in accordance with the dates specified in WAC 173-303-805(8).

(c) Failure to furnish a requested part B application on time, or to furnish in full the information required by the part B application, is grounds for termination of interim status under WAC 173-303-840.

(3) **Contents of part A of the permit application.** Part A of the final facility permit application must include the following information:

(a) The activities conducted by the applicant that require it to obtain a permit under the Hazardous Waste Management Act;

(b) Name, mailing address, and location, including latitude and longitude of the facility for which the application is submitted;

(c) Up to four SIC codes that best reflect the principal products or services provided by the facility;

(d) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity;

(e) The name, address, and phone number of the owner of the facility;

(f) Whether the facility is located on tribal lands;

(g) An indication of whether the facility is new or existing and whether it is a first or revised application;

(h) For existing facilities:

(i) A scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas; and

(ii) Photographs of the facility clearly delineating all existing structures, existing treatment, storage, and disposal areas, and sites of future treatment, storage, and disposal areas;

(i) A description of the processes to be used for treating, storing, and disposing of dangerous waste, and the design capacity of these items;

(j) A specification of the dangerous wastes listed or designated under WAC 173-303-070 to be treated, stored, or disposed of at the facility, an estimate of the quantity of those wastes to be treated, stored, or disposed annually, and a general description of the processes to be used for the wastes;

(k) A listing of all permits or construction approvals received or applied for under any of the following programs:

(i) Hazardous waste management program;

(ii) UIC program under the SWDA;

(iii) NPDES program under the CWA;

(iv) Prevention of Significant Deterioration (PSD) program under the Clean Air Act;

(v) Nonattainment program under the Clean Air Act;

(vi) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act;

(vii) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act;

(viii) Dredge or fill permits under section 404 of the CWA;

(ix) Other relevant environmental permits, including state permits;

(l) A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its dangerous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundary;

(m) A brief description of the nature of the business;

(n) For hazardous debris, a description of the debris category(ies) and contaminant category(ies) to be treated, stored, or disposed of at the facility.

(4) **New TSD facilities.**

(a) Except as provided in 40 CFR 270.10 (f)(3) for TSCA facilities, no person may begin physical construction of a new TSD facility without having submitted parts A and B of the permit application and having received a finally effective final facility permit.

(b) An application for a permit for a new TSD facility (including both parts A and B) may be filed any time after adoption of those standards in WAC 173-303-630 that apply to such a facility. The application must be filed with the EPA Regional Administrator if at the time of application the state in which the new TSD facility is proposed to be located has not received interim or final authorization for permitting such facility; otherwise it must be filed with the department. Except as provided in paragraph 40 CFR 270.10 (f)(3), all applications must be submitted at least one hundred eighty days before physical construction is expected to begin.

(5)(a) **Updating permit applications.**

(i) If any owner or operator of a dangerous waste management facility has filed part A of a permit application and has not yet filed part B, the owner or operator must file an amended part A application:

(A) With the EPA Regional Administrator if the department has not obtained interim authorization or final authorization, within six months after the adoption of revised regulations under 40 CFR Part 261 listing or identifying additional hazardous wastes, if the facility is treating, storing, or disposing of any of those newly listed or identified wastes;

(B) With the department, if it has obtained interim authorization or final authorization, no later than the effective date of regulatory provisions listing or designating wastes as dangerous in addition to those listed or designated under the previously approved state program, if the facility is treating, storing, or disposing of any of those newly listed or designated wastes; or

(C) As necessary to comply with provisions of WAC 173-303-805(7) for changes during interim status. Revised part A applications necessary to comply with the provisions of WAC 173-303-805(7) must be filed with the department.

(b) The owner or operator of a facility who fails to comply with the updating requirements of (a)(i) of this subsection does not receive interim status as to the wastes not covered by duly filed part A applications.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-803, filed 5/10/00, effective 6/10/00.]

WAC 173-303-804 Emergency permits. Requirements for an emergency permit. In the event the department finds that an imminent and substantial endangerment to human health or the environment exists, the department may issue a temporary emergency permit to a facility to allow treatment, storage, or disposal (TSD) of dangerous waste at a nonpermitted facility, or at a facility covered by an effective permit that does not otherwise allow treatment, storage, or disposal of such dangerous waste. Notice of the issuance of an emergency permit will be given to the fire marshal, police department, and other local emergency service agencies with jurisdiction near the location of the facility. The emergency permit:

(1) May be oral or written. If oral, it will be followed within five days by a written emergency permit;

(2) Will not exceed ninety days in duration for dangerous wastes;

(3) Will not exceed one hundred eighty days in duration for special waste;

(4) Will clearly specify the dangerous wastes to be received, and the manner and location of their treatment, storage, or disposal;

(5) May be terminated by the department at any time without following the decision making procedures of WAC 173-303-840 if the department determines that termination is appropriate to protect public health and the environment;

(6)(a) Will be accompanied by a public notice published under WAC 173-303-840 (3)(d) that includes:

(i) The name and address of the department;

(ii) The name and location of the permitted TSD facility;

(iii) A brief description of the wastes involved;

(iv) A brief description of the action authorized and reasons for authorizing it; and

(v) The duration of the emergency permit; and

(b) Will be given public notice by:

(i) Publication in a daily newspaper within the area affected;

(ii) By radio broadcast within the area affected;

(iii) By mailing a copy of the public notice to the persons described in WAC 173-303-840 (3)(e)(i); and

(iv) Any other method reasonably determined to give actual notice of the emergency permit to persons potentially affected by it; and

(7) Will incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this chapter.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-804, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-804, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-804, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-804, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-804, filed 4/18/84.]

WAC 173-303-805 Interim status permits. (1)(a) 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.

(b) Any person who owns or operates an "existing dangerous TSD facility" or a facility in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act or RCRA that renders the facility subject to the requirement to have a dangerous waste permit will have interim status and will be treated as having been issued a permit to the extent he or she has:

(i) Complied with the requirements of WAC 173-303-060 pertaining to notification of dangerous waste activity.

(Comment: Some existing facilities may not be required to file a notification under WAC 173-303-060. These facilities may qualify for interim status by meeting (b)(ii) of this subsection.)

(ii) Complied with the requirements of WAC 173-303-803 governing submission of part A applications.

(c) This subsection (1) will not apply to any facility that has been previously denied a final facility permit or if authority to operate the facility under the Hazardous Waste Management Act has been previously terminated.

(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 will notify the owner or operator in writing of the apparent deficiency. Such notice will specify the grounds for the department's belief that the application is deficient. The owner or operator will 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 will 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, will be deemed to have an interim status permit 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 will 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 will 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 must 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) Except as provided in (b) of this subsection, the owner or operator of an interim status facility may make the following changes at the facility:

(i) Treatment, storage, or disposal of new dangerous wastes not previously identified in Part A of the permit application (and, in the case of newly listed or identified wastes, addition of the units being used to treat, store, or dispose of the dangerous wastes on the effective date of the listing or identification) if the owner or operator submits a revised Part A permit application prior to such treatment, storage, or disposal (along with a justification detailing the equipment and process or processes that the owner or operator will use to treat, store, or dispose of the new dangerous wastes) and if the department does not explicitly deny the changes within sixty days of receipt of the revised application;

(ii) Increases in the design capacity of processes used at the facility if the owner or operator submits a revised Part A permit application prior to such a change (along with a justification explaining the need for the change), the requirements of WAC 173-303-281 are met, and the department approves the changes because:

(A) There is a lack of available treatment, storage, or disposal capacity at other dangerous waste management facilities; or

(B) The change is necessary to comply with a federal, state, or local requirement.

(iii) Changes in the processes for the treatment, storage, or disposal of dangerous waste or addition of processes if the owner or operator submits a revised Part A permit application prior to such change (along with a justification explaining the need for the change) and the department approves the change because:

(A) The change is necessary to prevent a threat to human health and the environment because of an emergency situation; or

(B) The change is necessary to comply with a federal, state, or local requirement.

(iv) Changes in the ownership or operational control of a facility 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 operational control of a facility occurs, the old owner or operator must 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. Upon demonstration to the department by the new owner or operator of compliance with the interim status financial requirements, the department will 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. The new owner or operator must demonstrate compliance with the financial requirements within six months of the date of the change in ownership or operational control of the facility. All other interim status duties are transferred effective immediately upon the date of the change in ownership or operational control of the facility.

(v) Changes made in accordance with an interim status corrective action order issued by EPA under section 3008(h) of RCRA or other federal authority, including an order or consent decree issued pursuant to WAC 173-303-646 (2) or (3), by the department under chapter 70.105 RCW or other state authority, or by a court in a judicial action brought by EPA or by the department. Changes under this subsection (7)(a)(v) are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(vi) Addition of newly regulated units for the treatment, storage, or disposal of dangerous waste if the owner or operator submits a revised Part A permit application on or before the date on which the unit becomes subject to the new requirements.

(b) Except as specifically allowed under this subsection (7)(b), changes listed under (a) of this subsection may not be made if they amount to reconstruction of the dangerous waste management 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 dangerous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

(i) Changes made solely for the purposes of complying with the requirements of WAC 173-303-640(4) for tanks and ancillary equipment.

(ii) If necessary to comply with federal, state, or local requirements, changes to an existing unit, changes solely involving tanks or containers, or addition of replacement surface impoundments that satisfy the standards of section 3004(o) of RCRA.

(iii) Changes that are necessary to allow owners or operators to continue handling newly listed or identified dangerous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of the rule establishing the new listing or identification.

(iv) Changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan.

(v) Changes necessary to comply with an interim status corrective action order issued by EPA under section 3008(h) or other federal authority, by the department under chapter 70.105 RCW or other state authority, or by a court in a judicial proceeding brought by EPA or an authorized state, provided that such changes are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(vi) Changes to treat or store, in tanks, containers, or containment buildings hazardous wastes subject to land disposal restrictions imposed by 40 CFR Part 268 or RCRA section 3004, provided that such changes are made solely for the purpose of complying with 40 CFR Part 268 or RCRA section 3004.

(vii) Addition of newly regulated units under (a)(vi) of this subsection.

(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 opera-

tor 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;

(e) A determination that the permit applicant has failed to satisfy the performance standards of WAC 173-303-283;

(f) For owners or operators of each land disposal facility which has been granted interim status prior to November 8, 1984, interim status terminated on November 8, 1985, unless:

(i) The owner or operator submits a Part B application for a permit for such facility prior to that date; and

(ii) The owner or operator certifies that such facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(g) For owners or operators of each land disposal facility which is in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act that render the facility subject to the requirement to have a final facility permit and which is granted interim status, interim status terminates twelve months after the date on which the facility first becomes subject to such permit requirement unless the owner or operator of such facility:

(i) Submits a Part B application for a final facility permit for such facility before the date twelve months after the date on which the facility first becomes subject to such permit requirement; and

(ii) Certifies that such facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(h) For owners or operators of any land disposal unit that is granted authority to operate under subsection (7)(a)(i), (ii) or (iii) of this section, interim status terminates on the date twelve months after the effective date of such requirement, unless the owner or operator certifies that such unit is in compliance with all applicable ground water monitoring and financial responsibility requirements;

(i) For owners and operators of each incinerator facility which achieved interim status prior to November 8, 1984, interim status terminated on November 8, 1989, unless the owner or operator of the facility submitted a Part B application for a final facility permit for an incinerator facility by November 8, 1986; or

(j) For owners or operators of any facility (other than a land disposal or an incinerator facility) which has achieved interim status prior to November 8, 1984, interim status terminated on November 8, 1992, unless the owner or operator of the facility submitted a Part B application for a final facility permit for the facility by November 8, 1988.

(9) Reserve.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-805, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-805, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-805, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-805, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-805, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-805, filed 1/4/89; 88-18-083 (Order 88-29), § 173-303-805, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-805, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-805, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-805, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-805, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-805, filed 2/10/82.]

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; and

(b) Certain recycling facilities that are not exempt from the permit requirements.

(2)(a) 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 must complete, sign, and submit an application to the department. An application must 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. The requirements for the contents of a part A permit application are at WAC 173-303-803(4).

(b) Persons covered by permits by rule (WAC 173-303-802) need not apply. Procedures for applications, issuance and administration of emergency permits are found exclusively in WAC 173-303-804. Procedures for application, issuance and administration of research, development, and demonstration permits are found exclusively in WAC 173-303-809.

(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 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 must consist of the information required in (a) through (m) 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 make allowance for submission of such information on a case-by-case basis. Information required in Part B must 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 must 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 and hazardous debris to be handled at the facility. At a minimum, these analyses must 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.

(v) A copy of the general inspection schedule required by WAC 173-303-320(2): Include where applicable, as part of the inspection schedule, specific requirements in WAC 173-303-395 (1)(d), 173-303-630(6), 173-303-640 (4)(a)(i) and (6), 173-303-650(4), 173-303-655(4), 173-303-660 (4) and (5), 173-303-665(4), 173-303-670(7), and 173-303-680(3), and 40 CFR 264.1033, 264.1035, 264.1052, 264.1053, 264.1058, 264.1064, 264.1067, 264.1084, 264.1085, 264.1086, and 264.1088.

(vi) A justification of any request for a waiver(s) of the preparedness and prevention requirements of WAC 173-303-340, or a description of the procedures used to comply with these requirements.

(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(7), 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;

(E) Prevent undue exposure of personnel to dangerous waste (for example, protective clothing); and

(F) Prevent releases to the atmosphere.

(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) Seismic risk consideration. The owner/operator of a proposed facility or expansion of an existing facility must identify the seismic risk zone in which the facility is intended to be located. Where state or local maps are not available, United States Geological Survey Open File Report number 82-1033 may be used to identify seismic risk zones. The owner/operator must demonstrate that the facility can and will be designed to resist seismic ground motion and that the design is sufficient to withstand the maximum horizontal acceleration of a design earthquake specified in the demonstration.

(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(8), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), and 173-303-680 (2) and (4).

(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 must 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 sewerage 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 facilities containing a regulated unit 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 Appendix IX of 40 CFR Part 264, 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). Alternatively, the owner or operator can obtain written authorization in advance from the department to submit a proposed permit schedule for development and submittal of such information. 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; and

(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;

(IV) A description of how the ground water monitoring program will demonstrate the adequacy of the corrective action; and

(V) The permit may contain a schedule for submittal of the information required in (a)(xx)(H)(III) and (IV) of this subsection, provided the owner or operator obtains written authorization from the department prior to submittal of the complete permit application.

(xxi) Contingent ground water protection program. The following actions are required for owners or operators of proposed land-based facilities and may be required for owners/operators of existing land-based facilities, except as provided in WAC 173-303-645 (1)(b).

(A) Contingent ground water protection program. The owner or operator must develop a contingent ground water protection program. The purpose of this program will be to prevent the migration of dangerous waste or dangerous waste constituents from waste management units to the nearest hydraulically downgradient receptor at any time during the life of the facility. For the purposes of this subsection, the downgradient receptor will be the facility property line, perennial surface water or domestic well, whichever is nearest to the dangerous waste management unit. The contingent ground water protection program must at a minimum:

(I) Define the local and regional hydrogeologic characteristics. The contingent ground water protection program must be based on a sufficient understanding of site geology, hydrology, and other factors to allow evaluation of its adequacy by the department. Site characterization must be performed in sufficient detail to provide, at a minimum, the following information: Site geostratigraphy; site hydrostratigraphy; identification of aquifers, aquitards, and aquicludes; flow models for each stratum (i.e., porus media or fracture flow); the distribution of vertical and horizontal hydraulic conductivity; effective porosity; horizontal and vertical hydraulic gradients; ground water travel time to receptors; and heterogeneity for each stratigraphic unit. Site interpretative models must include ranges of tested values: The provisions of WAC 173-303-806 (4)(a)(xx) and 173-303-645, must be used as guidance in the development of the contingent ground water protection program.

(II) Identify the range of potential release scenarios that could occur during facility operation and the post-closure care period. The scenarios must incorporate the intended design(s) of the dangerous waste management unit(s), wastes to be placed in the dangerous waste management unit(s), waste and leachate chemistry, waste, and soil and rock geochemical interactions, and the results of site characterization pursuant to WAC 173-303-806 (4)(a)(xx) and (xxi);

(III) Include specific physical action to be taken if dangerous waste or dangerous waste constituents are detected in one or more of the monitoring wells. The physical actions must be based upon engineering feasibility studies describing remedial actions established from site specific conditions and waste features. Such actions may include installation of a pump and treat system between the monitoring well and the receptor or installation of a section of slurry wall to decrease ground water travel times. The description of the systems must also provide how the remediation system will achieve cleanup, its efficiency, and the timeframes involved;

(IV) Incorporate the design, construction, and sampling methods outlined in WAC 173-303-645 (8)(c), (d), (e), (f), and (g);

(V) Demonstrate to the satisfaction of the department that the owner/operator of the dangerous waste management facility has the financial capability to implement the proposed ground water protection plan; and

(VI) Include reporting procedures to the department.

(B) The response actions identified in WAC 173-303-806 (4)(a)(xxi)(A)(III) must be activated if the presence of dangerous waste or dangerous waste constituents have been detected at the point of compliance in accordance with WAC 173-303-645 (9)(g), and must continue until the concentration of dangerous waste or dangerous waste constituents under WAC 173-303-645(4) are reduced to levels below their respective concentration limits specified in WAC 173-303-645(5).

(C) If the owner/operator does not demonstrate that the ground water protection program will prevent the migration of dangerous waste or its constituents to the nearest receptor, the department will require corrections to be made in the protection program, increase setbacks from the nearest receptor, or deny the permit.

(xxii) Additional requirements for incineration facilities. The following actions regarding the protection of human health and the environment must be taken by owners/operators of proposed hazardous waste incineration facilities and may be required for owners or operators of existing incineration facilities.

(A) Ambient monitoring program. The owner/operator will be required to develop an ambient monitoring program. The purpose of this ambient monitoring program will be to: Gather baseline environmental information characterizing on-site and off-site environmental conditions prior to facility operation; and, to identify and measure changes in the environment which may be linked to the construction and operation of the facility. The ambient monitoring program must, at a minimum:

(I) Include a characterization of facility emission sources and pathways of contaminant transport.

(II) Characterize local and regional ecosystems, including agricultural, and their sensitivity to the potential contaminants from the facility.

(III) Incorporate the findings of the environmental impact statement's health risk assessment and/or other assessments specific to the proposal or available to the scientific community regarding emissions from dangerous waste management facilities and their potential human health and environmental effects.

(IV) Identify sensitive indicator plants and animals for biomonitoring, identify specific chemical constituents of concern, sampling locations, sampling frequency, sampling and analytical methods, chain of custody procedures, quality assurance/quality control procedures, reporting times, recordkeeping procedures, and data evaluation procedures.

(B) Environmental review procedures. The owner/operator must establish procedures to allow for public review of facility operation and all monitoring data required by the facility's permit. In developing this process, the owner/operator must, at a minimum:

(I) Coordinate this effort with the public and interested local organizations;

(II) Identify the informational needs of the community and develop a public information process which meets these needs; and

(III) Develop procedures allowing full access by the public to all monitoring data required by the permit.

(C) Impact mitigation plan. Prior to the department issuing a permit, the owner/operator must submit an impact mitigation plan which demonstrates to the satisfaction of the department that the owner/operator will mitigate all probable significant adverse impacts, including economic, due to facility location and operations. The owner/operator must use as a basis for identifying probable significant adverse economic impacts those probable economic impacts identified during a public review process, such as the environmental impact statement scoping process, if applicable.

The plan must include, but is not limited to, a description of what the owner/operator will do to reduce or prevent any probable significant impacts before they occur, to mitigate such impacts should they occur, and to ensure the owner/operator has and will have the financial capability to implement such preventative and mitigative measures. Mitigation measures may include, as an element, financial compensation to adversely affected parties.

This plan may be submitted with environmental reports the department requires for compliance with the State Environmental Policy Act, with the written citizen proponent negotiation report and agreements, or with the Part B permit application. If the plan does not demonstrate that the owner/operator is capable of adequately mitigating the identified probable significant adverse economic impacts, the department will require modification of the plan or of the proposed facility location, or will deny the permit application. The department must be satisfied with the plan prior to the issuance of the permit.

(xxiii) Information requirements for solid waste management units.

(A) The following information is required for each solid waste management unit:

(I) The location of the unit on the topographic map required under (a)(xviii) of this subsection.

(II) Designation of type of unit.

(III) General dimensions and structural description (supply any available drawings).

(IV) Time frame over which the unit was operated.

(V) Specification of all wastes that have been managed in the unit, to the extent available.

(B) The owner/operator of any facility containing one or more solid waste management units must submit all available information pertaining to any release of dangerous wastes or dangerous constituents from such unit or units.

(C) The owner/operator must conduct and provide the results of sampling and analysis of ground water, landsurface, and subsurface strata, surface water, or air, which may include the installation of wells, where the department determines it is necessary to complete a RCRA Facility Assessment that will determine if a more complete investigation is necessary.

WAC 173-303-806 (4)(a)(xxiv):

(xxiv) Information requirements for known releases.

(A) In order to provide for corrective action necessary to protect human health and the environment, the following information is required for all known significant releases of dangerous waste and dangerous constituents (as defined by WAC 173-303-646 (2)(c)) at, and from, the facility. A significant release is a release which has affected or has the potential to affect human health or the environment at or beyond the facility.

(I) The location of the release on the topographic map required under (a)(xviii) of this subsection.

(II) General dimensions of the release and any relevant structural description. For example, if the release is from a storage tank, provide a structural description of the tank. Supply any available drawings.

(III) Time frame over which the release occurred.

(IV) Specification of all dangerous waste or dangerous constituents (as defined by WAC 173-303-646 (2)(c)) present in the release, to the extent available.

(xxv) A summary of the preapplication meeting, along with a list of attendees and their addresses, and copies of any written comments or materials submitted at the meeting, as required under WAC 173-303-281 (3)(c).

(xxvi) For land disposal facilities, if a case-by-case extension has been approved under 40 CFR 268.5 or a petition has been approved under 40 CFR 268.6, a copy of the notice of approval for the extension or petition is required.

(b) Specific Part B information requirements for containers. Except as otherwise provided in WAC 173-303-600(3),

owners or 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;

(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); and

(vi) Information on air emission control equipment as required in (m) of this subsection.

(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) A written assessment that is reviewed and certified by an independent, qualified, registered professional engineer as to the structural integrity and suitability for handling dangerous waste of each tank system, as required under WAC 173-303-640 (2) and (3);

(ii) Dimensions and capacity of each tank;

(iii) Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);

(iv) A diagram of piping, instrumentation, and process flow for each tank system;

(v) A description of materials and equipment used to provide external corrosion protection, as required under WAC 173-303-640 (3)(a)(iii)(B);

(vi) For new tank systems, a detailed description of how the tank system(s) will be installed in compliance with WAC 173-303-640 (3)(b), (c), (d), and (e);

(vii) Detailed plans and a description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of WAC 173-303-640 (4)(a), (b), (c), (d), (e), and (f);

(viii) For tank systems for which a variance from the requirements of WAC 173-303-640(4) is sought (as provided by WAC 173-303-640 (4)(g)):

(A) 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 waste or dangerous constituents into the ground water or surface water during the life of the facility; or

(B) A detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment.

(ix) Description of controls and practices to prevent spills and overflows, as required under WAC 173-303-640 (5)(b);

(x) For tank systems in which ignitable, reactive, or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with the requirements of WAC 173-303-640 (9) and (10);

(xi) A description of the marking and/or labeling of tanks;

(xii) Tank design to prevent escape of vapors and emissions of acutely or chronically toxic (upon inhalation) EHW; and

(xiii) Information on air emission control equipment as required in (m) of this subsection.

(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 designed, and is or will be constructed, operated and maintained to meet the requirements of WAC 173-303-650 (2)(j), (10), (11), and 173-303-335, addressing the following items:

(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;

(C) Structural integrity of dikes;

(D) The double liner and leak (leachate) detection, collection, and removal system, if the surface impoundment

must meet the requirements of WAC 173-303-650 (2)(j). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-650 (2)(k), (l), or (m), submit appropriate information;

(E) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(F) The construction quality assurance (CQA) plan if required under WAC 173-303-335; and

(G) Proposed action leakage rate, with rationale, if required under WAC 173-303-650(10), and response action plan, if required under WAC 173-303-650(11).

(iii) Reserve.

(iv) A description of how each surface impoundment, including the double liner system, leak detection system, cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of WAC 173-303-650 (4)(a), (b), and (d). 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;

(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); and

(xi) Information on air emission control equipment as required in (m) of this subsection.

(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 waste pile is designed, and is or will be constructed, operated, and maintained to meet the requirements of WAC 173-303-335, 173-303-660 (2)(j), (11) and (12), addressing the following items:

(A)(I) The liner system (except for an existing portion of a pile) if the waste pile must meet the requirements of WAC 173-303-660(2), 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), 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 dangerous constituents into the ground water or surface water at any future time;

(II) The double liner and leak (leachate) detection, collection, and removal system, if the waste pile must meet the requirements of WAC 173-303-660 (2)(j). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-660 (2)(k), (l), or (m), submit appropriate information;

(III) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(IV) The construction quality assurance (CQA) plan if required under WAC 173-303-335;

(V) Proposed action leakage rate, with rationale, if required under WAC 173-303-660(3), and response action plan, if required under WAC 173-303-660(4);

(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) Reserve.

(v) A description of how each waste pile, including the double liner system, leachate collection and removal system, leak detection system, cover system 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;

(III) An identification of any dangerous organic constituents listed in WAC 173-303-9905 or, if not listed, which cause the waste(s) to be regulated, which are present in the waste to be burned, except that the applicant need not analyze for constituents which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in WAC 173-303-110 (3)(a), or their equivalent;

(IV) An approximate quantification of the dangerous constituents identified in the waste, within the precision produced by the analytical methods specified in WAC 173-303-110 (3)(a); and

(V) A quantification of those dangerous constituents in the waste which may be designated as principal organic dangerous constituents (PODC's) based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in WAC 173-303-670(4);

(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)(iii)(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 will 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;

(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; and

(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 designed, and is or will be constructed, operated and maintained to comply with the requirements of WAC 173-303-335, 173-303-665 (2), (8) and (9) addressing the following items:

(A)(I) The liner system (except for an existing portion of a landfill), if the landfill must meet the requirements of WAC 173-303-665 (2)(a), 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 designs 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;

(II) The double liner and leak (leachate) detection, collection, and removal system, if the landfill must meet the requirements of WAC 173-303-665 (2)(h). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-665 (2)(j), (k) or (l), submit appropriate information;

(III) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(IV) The construction quality assurance (CQA) plan if required under WAC 173-303-335;

(V) Proposed action leakage rate, with rationale, if required under WAC 173-303-665(8), and response action plan, if required under 173-303-665(9);

(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) Reserve.

(iv) A description of how each landfill, including the double liner system, leachate collection and removal system, cover systems, and appurtenances for control for run-on and run-off will be inspected in order to meet the requirements of WAC 173-303-665(4). This information must 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 incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how WAC 173-303-665(7) will be complied with;

(vii) A description of how each landfill will be designed and operated in order to comply with WAC 173-303-140.

(i) Specific Part B information requirements for miscellaneous units. Except as otherwise provided in WAC 173-303-680(1), owners and operators of facilities that treat, store, or dispose of dangerous waste in miscellaneous units must provide the following additional information:

(i) A detailed description of the unit being used or proposed for use, including the following:

(A) Physical characteristics, materials of construction, and dimensions of the unit;

(B) Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of WAC 173-303-680 (2) and (3); and

(C) For disposal units, a detailed description of the plans to comply with the post-closure requirements of WAC 173-303-680(4).

(ii) Detailed hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards of WAC 173-303-680(2). If the applicant can demonstrate that he does not violate the environmental performance standards of WAC 173-303-680(2) and the department agrees with such demonstration, preliminary hydrologic, geologic, and meteorologic assessments will suffice.

(iii) Information on the potential pathways of exposure of humans or environmental receptors to dangerous waste or dangerous constituents and on the potential magnitude and nature of such exposures.

(iv) For any treatment unit, a report on a demonstration of the effectiveness of the treatment based on laboratory or field data.

(v) Any additional information determined by the department to be necessary for evaluation of compliance of

the unit with the environmental performance standards of WAC 173-303-680(2).

(j) Specific Part B information requirements for process vents. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that have process vents to which WAC 173-303-690 applies must provide the following additional information:

(i) For facilities that cannot install a closed-vent system and control device to comply with the provisions of WAC 173-303-690 on the effective date that the facility becomes subject to the provisions of WAC 173-303-690 or 40 CFR 265 Subpart AA incorporated by reference at WAC 173-303-400 (3)(a), an implementation schedule as specified in 40 CFR section 264.1033 (a)(2).

(ii) Documentation of compliance with the process vent standards in 40 CFR section 264.1032, including:

(A) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the dangerous waste management units on a facility plot plan).

(B) Information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, estimates of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or concentrations) that represent the conditions that exist when the waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(C) Information and data used to determine whether or not a process vent is subject to the requirements of 40 CFR section 264.1032.

(iii) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with the requirements of 40 CFR 264.1032, and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in 40 CFR 264.1035 (b)(3).

(iv) Documentation of compliance with 40 CFR 264.1033, including:

(A) A list of all information references and sources used in preparing the documentation.

(B) Records, including the dates, of each compliance test required by 40 CFR 264.1033(k).

(C) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" (WAC 173-303-110 (3)(g)(viii)) or other engineering texts acceptable to the department that present basic control device design information. The design analysis will address the vent stream characteristics and control device operation parameters as specified in 40 CFR 264.1035 (b)(4)(iii).

(D) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the dangerous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(E) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater unless the total organic emission limits of 40 CFR 264.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.

(k) Specific Part B information requirements for equipment leaks. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that have equipment to which WAC 173-303-691 applies must provide the following additional information:

(i) For each piece of equipment to which WAC 173-303-691 applies:

(A) Equipment identification number and dangerous waste management unit identification.

(B) Approximate locations within the facility (e.g., identify the dangerous waste management unit on a facility plot plan).

(C) Type of equipment (e.g., a pump or pipeline valve).

(D) Percent by weight total organics in the hazardous waste stream at the equipment.

(E) Hazardous waste state at the equipment (e.g., gas/vapor or liquid).

(F) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").

(ii) For facilities that cannot install a closed-vent system and control device to comply with the provisions of WAC 173-303-691 on the effective date that the facility becomes subject to the provisions of WAC 173-303-691 or 40 CFR Part 265 Subpart BB incorporated by reference at WAC 173-303-400 (3)(a), an implementation schedule as specified in 40 CFR 264.1033 (a)(2).

(iii) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in 40 CFR section 264.1035 (b)(3).

(iv) Documentation that demonstrates compliance with the equipment standards in 40 CFR sections 264.1052 to 264.1059. This documentation will contain the records required under 40 CFR 264.1064. The department may request further documentation before deciding if compliance has been demonstrated.

(v) Documentation to demonstrate compliance with 40 CFR section 264.1060 will include the following information:

(A) A list of all information references and sources used in preparing the documentation.

(B) Records, including the dates, of each compliance test required by 40 CFR 264.1033(j).

(C) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "ATPI Course 415: Control of Gaseous Emissions" (incorporated by reference as specified in WAC 173-303-110 (3)(g)(viii)) or other engineering texts acceptable to the department that present basic control device design information. The design analysis will address the vent stream characteristics and control device operation parameters as specified in 40 CFR 264.1035(b)(4)(iii).

(D) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the dangerous waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(E) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater.

(l) Special Part B information requirements for drip pads.

Except as otherwise provided by WAC 173-303-600(3), owners and operators of dangerous waste treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads must provide the following additional information:

(i) A list of hazardous wastes placed or to be placed on each drip pad.

(ii) If an exemption is sought to WAC 173-303-645, as provided by WAC 173-303-645(1), detailed plans and an engineering report describing how the requirements of WAC 173-303-645 (1)(b) will be met.

(iii) Detailed plans and an engineering report describing how the drip pad is or will be designed, constructed, operated and maintained to meet the requirements of WAC 173-303-675(4), including the as-built drawings and specifications. This submission must address the following items as specified in WAC 173-303-675(2):

(A) The design characteristics of the drip pad;

(B) The liner system;

(C) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time;

(D) Practices designed to maintain drip pads;

(E) The associated collection system;

(F) Control of run-on to the drip pad;

(G) Control of run-off from the drip pad;

(H) The interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad;

(I) Procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or other materials, including but not limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning and provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned.

(J) Operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized;

(K) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and nonpressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices;

(L) Provisions for ensuring that collection and holding units associated with the run-on and run-off control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system;

(M) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals.

(N) A description of how each drip pad, including appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of WAC 173-303-675(4). This information should be included in the inspection plan submitted under (a)(v) of this subsection.

(O) A certification signed by an independent qualified, registered professional engineer, stating that the drip pad design meets the requirements of WAC 173-303-675 (4)(a) through (f).

(P) A description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under WAC 173-303-675 (6)(a). For any waste not to be removed from the drip pad upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-665(6) 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.

(m) Specific Part B information requirements for air emission controls for tanks, surface impoundments, and containers (Subpart CC) at 40 CFR Part 270.27 are incorporated by reference.

(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 must 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 will 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 will be judged independently of the status of any other permit application or permit for the same facility or activity. The department may deny a permit for the active life of a dangerous waste management facility or unit before receiving a complete application for a permit.

(9) Recordkeeping. Applicants must 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 will contain general permit conditions described in WAC 173-303-810.

(11) Permit duration.

(a) Final facility permits will 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 will not be extended beyond ten years, unless otherwise authorized under subsection (7) of this section.

(d) Each permit for a land disposal facility will be reviewed by the department five years after the date of permit issuance or reissuance and will be modified as necessary, as provided in WAC 173-303-830(3).

(12) Reserve.

(13) Grounds for denial. A permit application will be denied pursuant to the procedures in WAC 173-303-840 if it is determined that the proposed location and/or activity endangers public health and the environment as demonstrated by the permit applicant's failure to satisfy the performance standards of WAC 173-303-283.

(14) Permit changes. All final facility permits will be subject to the requirements of permit changes, WAC 173-303-830.

(15) Procedures for decision making. Issuance of final facility permits will be subject to the procedures for decision making described in WAC 173-303-840.

(16) Other requirements for final recycling facility permits. In lieu of issuing a final 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.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-806, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-806, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-806, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-806, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-806, filed 3/7/91, effective 4/7/91. Statutory Authority: RCW 43.21A.080 and 70.105.210 et seq. 90-20-016, § 173-303-806, filed 9/21/90, effective 10/22/90. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-806, filed 1/4/89; 88-18-083 (Order 88-29), § 173-303-806, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-806, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-806, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-806, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-806, filed 4/18/84.]

WAC 173-303-807 Trial burns for dangerous waste incinerator final facility permits. (1) Purpose and applicability. For purposes of determining operational readiness and establishing conditions in final facility permits for dangerous waste incinerators, the department may approve trial burns. Trial burns may not exceed seven hundred twenty hours operating time, except that the department may extend the duration of this operational period once, up to seven hundred twenty additional hours, at the request of the owner/operator of the incinerator when good cause is shown. The permit may be modified to reflect the extension according to WAC 173-303-830(4). The procedures for requesting and approving trial burns are described in:

(a) Subsection (11) of this section for existing incinerators with interim status permits; and

(b) Subsection (13) of this section for new incinerators and for incinerators with final facility permits in which the owner/operator wishes to burn new wastes not currently included in the permit.

(2) Trial burn plan. The trial burn must be conducted in accordance with a trial burn plan prepared by the applicant and approved by the department. The trial burn plan will then become a condition of the permit and will include the following information:

(a) An analysis of each waste or mixture of waste to be burned which includes:

(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;

(iii) An analysis identifying any dangerous organic constituents listed in WAC 173-303-9905, and any other dangerous constituents which, although not listed, caused the waste to be regulated as a dangerous waste, which are reasonably expected to be present in the waste to be burned. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified or referenced in WAC 173-303-110 (3)(a), or their equivalent;

(iv) An approximate quantification of the dangerous constituents identified in the waste, within the precision produced by the analytical methods specified or referenced in WAC 173-303-110 (3)(a); and

(v) A quantification of those dangerous constituents in the waste which may be designated as principal organic dangerous constituents (PODC) based on data submitted from other trial or operational burns which demonstrate compliance with the performance standard in WAC 173-303-670(4);

(b) A detailed engineering description of the incinerator for which the trial burn permit is sought including:

(i) Manufacturer's name and model number of incinerator (if available);

(ii) Type of incinerator;

(iii) Linear dimensions of the incinerator unit including the cross sectional area of the combustion chamber;

(iv) Description of the auxiliary fuel system (type/feed);

(v) Capacity of the prime air mover;

(vi) Description of automatic waste feed cutoff system(s);

(vii) Stack gas monitoring and pollution control equipment;

(viii) Nozzle and burner design;

(ix) Construction materials; and

(x) Location and description of temperature, pressure, and flow indicating and control devices;

(c) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;

(d) A detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the department's decision under subsection (5) of this section;

(e) A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, air feed rate, use of auxiliary fuel, and other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator;

(f) A description of, and planned operating conditions for, any emission control equipment which will be used;

(g) Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction;

(h) A detailed test protocol to sample and analyze the following for designation under WAC 173-303-070:

(i) Any incinerator ash residue collected in the incinerator; and

(ii) Any residues collected in the air pollution control devices; and

(i) Such other information as the department reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this section.

(3) Additional information required. The department, in reviewing the trial burn plan, will evaluate the adequacy of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this section.

(4) Trial PODCs. Based on the waste analysis data in the trial burn plan, the department will specify as trial principal organic dangerous constituents (trial PODCs) those constituents for which destruction and removal efficiencies must be calculated during the trial burn. These trial PODCs will be specified by the department based on its estimate of the difficulty of incineration of the constituents identified in the waste analysis, the concentration or mass in the waste feed, and the dangerous waste constituent or constituents identified in WAC 173-303-9905, or identified as causing the waste to be regulated as a dangerous waste.

(5) Approval of the plan. The department will approve a trial burn plan if it finds that:

(a) The trial burn is likely to determine whether the incinerator performance standard required by WAC 173-303-670(4) can be met;

(b) The trial burn itself will not present an imminent hazard to public health or the environment;

(c) The trial burn will help the department to determine operating requirements to be specified under WAC 173-303-670(6); and

(d) The information sought in (a), (b), and (c) of this subsection cannot reasonably be developed through other means.

(6) The department must send a notice to all persons on the facility mailing list as set forth in WAC 173-303-840 (3)(e)(i)(D) and to the appropriate units of state and local government as set forth in WAC 173-303-840 (3)(e)(i)(E) announcing the scheduled beginning and completion dates for the trial burn. The applicant may not begin the trial burn until after the department has issued such notice.

(a) This notice must be mailed within a reasonable time period before the scheduled trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the department.

(b) This notice must contain:

(i) The name and telephone number of the applicant's contact person;

(ii) The name and telephone number of the department's contact office;

(iii) The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

(iv) An expected time period for beginning and completion of the trial burn.

(7) Trial burns. During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:

(a) A quantitative analysis of the trial PODCs in the waste feed to the incinerator;

(b) A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial PODCs, O_2, hydrogen chloride (HCl), carbon monoxide (CO) and dangerous combustion byproducts, including the total mass emission rate of byproducts as a percent of the total mass feed rate of PODCs fed to the incinerator;

(c) A quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial PODCs and whether they are designated according to WAC 173-303-070;

(d) A total mass balance of the trial PODCs in the waste;

(e) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in WAC 173-303-670 (4)(a);

(f) If the HCl emission rate exceeds 1.8 kilograms of HCl per hour (4 pounds per hour), a computation of HCl removal efficiency in accordance with WAC 173-303-670 (4)(c)(i);

(g) A computation of particulate emissions, in accordance with WAC 173-303-670 (4)(c)(ii);

(h) An identification of sources of fugitive emissions and their means of control;

(i) A measurement of average, maximum, and minimum temperatures, and combustion gas velocity;

(j) A continuous measurement of carbon monoxide in the exhaust gas;

(k) An identification of any existing air emission standards where a state or local air pollution control authority has established emission standards and such standards are applicable to the incinerator; and

(l) Such other information as the department may specify as necessary to ensure that the trial burn will determine compliance with the performance standard of WAC 173-303-670(4), and to establish the operating conditions required by WAC 173-303-670(6).

(8) Certification. The applicant must submit to the department a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and must submit the results of all determinations required by subsection (7) of this section. This submission must be made within thirty days of the completion of the trial burn, or later if approved by the department.

(9) Submission of data. All data collected during any trial burn must be submitted to the department following the completion of the trial burn.

(10) Signatures required. All submissions required under this section must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application under WAC 173-303-810(12).

(11) Based on the results of the trial burn, the department will set the operating requirements in the final permit according to WAC 173-303-670(6). The permit modification shall proceed according to WAC 173-303-830(4).

(12) Existing incinerators with interim status permits.

(a) The owner/operator of an existing incinerator currently operating under an interim status permit may, when required by the department (or when he chooses) to apply for a final facility permit, request the department to approve of a trial burn. The trial burn may be requested for the purposes of determining feasibility of compliance with the performance standards of WAC 173-303-670(4) and the operating conditions of WAC 173-303-670(6). If a trial burn is requested, the owner/operator must prepare and submit a trial burn plan and, upon approval by the department, perform a trial burn in accordance with subsections (2) through (10) of this section.

(b) If the department approves the trial burn, it will issue a notice of interim status modification granting such approval and specifying the conditions applicable to the trial burn. The notice of modification will be a condition of the interim status permit. Note: The national emission standards for hazardous air pollutants may require review for a notice of construction. Owners and operators should consult chapter 173-400 WAC or local air pollution control agency regulations for applicability.

(c) If the trial burn is approved before submitting a final facility permit application, the owner/operator must complete the trial burn and submit the information described in subsection (7) of this section, with Part B of the permit application. If completion of this process conflicts with the date set for submission of Part B of the final facility permit application, the owner/operator must contact the department to extend the date for submitting the Part B or the trial burn results. If the applicant submits a trial burn plan with Part B of the final facility permit application, the department will specify in the notice of interim status modification issued under (b) of this subsection, a time period for conducting the trial burn and submitting the results. Trial burn results must be submitted prior to the issuance of the permit.

(13) New incinerators and new wastes.

(a)(i) The owner/operator of a new incinerator may submit with Part B of a final facility permit application a request for approval of a trial burn. This request must include a statement of why the trial burn is desirable, and a trial burn plan prepared in accordance with subsection (2) of this section.

(ii) The department will proceed to issue a final facility permit in accordance with WAC 173-303-806. The permit will include the trial burn plan, and will establish operating conditions for the trial burn including but not limited to those described in WAC 173-303-670(6). The time period for conducting the trial burn and submitting the results will also be specified in the permit.

(iii) After the trial burn has been completed and the results submitted to the department, the final facility permit will be modified in accordance with WAC 173-303-830(4) to establish the final operating requirements and performance standards for the incinerator.

(b) The owner/operator of an incinerator with a final facility permit who wishes to burn new wastes not currently included in his permit may request approval of a trial burn for the new wastes. The request and approval will be handled in the same way as described in (a) of this subsection, except that in lieu of issuing an entirely new final facility permit the department will modify the existing final facility permit in accordance with WAC 173-303-830.

(14) For the purpose of determining feasibility of compliance with the performance standards of WAC 173-303-670(4) and of determining adequate operating conditions under WAC 173-303-670(6), the applicant for a permit for an existing dangerous waste incinerator must prepare and submit a trial burn plan and perform a trial burn in accordance with WAC 173-303-806 (4)(f) and subsections (2) through (5) and (7) through (10) of this section or, instead, submit other information as specified in WAC 173-303-806 (4)(f)(iii). The department must announce its intention to approve the trial burn plan in accordance with the timing and distribution requirements of subsection (6) of this section. The contents of the notice must include: The name and telephone number of a contact person at the facility; the name and telephone number of a contact office at the department; the location where the trial burn plan and any supporting documents can be reviewed and copied; and a schedule of the activities that are required prior to permit issuance, including the antic-

ipated time schedule for department approval of the plan and the time period during which the trial burn would be conducted. Applicants submitting information under WAC 173-303-806 (4)(f)(i) are exempt from compliance with WAC 173-303-670 (4) and (6) and, therefore, are exempt from the requirement to conduct a trial burn. Applicants who submit trial burn plans and receive approval before submission of a permit application must complete the trial burn and submit the results, specified in subsection (7) of this section, with Part B of the permit application. If completion of this process conflicts with the date set for submission of the Part B application, the applicant must contact the department to establish a later date for submission of the Part B application or the trial burn results. Trial burn results must be submitted prior to issuance of the permit. When the applicant submits a trial burn plan with Part B of the permit application, the department will specify a time period prior to permit issuance in which the trial burn must be conducted and the results submitted.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-807, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-807, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-807, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-807, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-807, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-807, filed 4/18/84.]

WAC 173-303-808 Demonstrations for dangerous waste land treatment final facility permits. (1) Purpose and applicability. This section is applicable to the owner/operator of a land treatment facility who must demonstrate that his proposed treatment will be successful. The purpose of this section is to allow the department to issue a land treatment demonstration permit.

(2) Permit issuance. The department may issue a land treatment demonstration permit either in advance of or as part of a final facility permit so that the owner/operator of a land treatment facility can make the demonstration required in WAC 173-303-655(3). If issued in advance of the final facility permit, the land treatment demonstration permit will be issued as described in subsection (3) of this section, as a demonstration permit only. If issued as part of the final facility permit, the land treatment demonstration and final facility permit will be issued as described in subsection (4) of this section, as a phased permit. The determination for which procedure to follow will be made by the department based on the information submitted by the owner/operator in Part B of the final facility permit application.

(3) Demonstration permit only.

(a) If the department finds that the Part B does not contain enough information regarding the proposed treatment to allow the department to establish permit conditions necessary for compliance with all requirements of WAC 173-303-655, it may issue a land treatment demonstration permit only. The demonstration permit will be issued in accordance with the decision-making procedures of WAC 173-303-840. The demonstration permit may be issued either as a treatment or disposal permit, will cover only the field test or laboratory analyses, will contain only those requirements necessary to meet the standards in WAC 173-303-655(3), and will provide a specific time period for the demonstration. The department may extend the demonstration period as a modification (or minor modification, if applicable) to the demonstration permit.

(b) Within thirty days (unless the department approves a later date) of the end of the treatment demonstration, the owner/operator must submit a revised Part B to the department containing the results of the field tests or laboratory analyses and all data developed during the demonstration period. The department will then use the information and Part B to determine whether or not there is adequate information to issue a final facility permit which will incorporate conditions sufficient to provide compliance with all requirements of WAC 173-303-655. If the information is adequate, the department will proceed under WAC 173-303-806 to issue a final facility permit. If the information is not adequate, the department may, as the situation warrants, either issue a modification to the demonstration permit in accordance with the procedures of subsection (3)(a) of this section, or deny the final facility permit application.

(4) Phased permit.

(a) The department may issue a two-phase final facility permit if it finds that, based on information submitted in Part B of the permit application, substantial (although incomplete and inconclusive) information exists upon which to base the issuance of a final facility permit. The phased permit will be issued in the same manner as a final facility permit under WAC 173-303-806, except that it will contain a first phase for making a land treatment demonstration, and a second phase (to become effective after completion of the first phase) for establishing conditions for operation of the land treatment facility.

(b) If the department finds that a phased permit may be issued, it will establish, as requirements in the first phase of the facility permit, conditions for conducting the field tests or laboratory analyses. These permit conditions will include design and operating parameters (including the duration of the tests or analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone), monitoring procedures, post-demonstration cleanup activities, and any other conditions which the department finds may be necessary under WAC 173-303-655 (3)(c). The department will include conditions in the second phase of the facility permit to attempt to meet all WAC 173-303-655 requirements pertaining to unit design, construction, operation, and maintenance. The department will establish these conditions in the second phase of the permit based upon the substantial but incomplete or inconclusive information contained in the Part B application.

(i) The first phase of the permit will be effective as provided in WAC 173-303-840 (8)(b).

(ii) The second phase of the permit will be effective as provided in (d) of this subsection.

(c) When the owner or operator who has been issued a two-phase permit has completed the treatment demonstration, he must submit to the department a certification, signed by a person authorized to sign a permit application or report under WAC 173-303-810(12), that the field tests or labora-

tory analyses have been carried out in accordance with the conditions specified in phase one of the permit for conducting such tests or analyses. The owner or operator must also submit all data collected during the field tests or laboratory analyses within thirty days of completion of those tests or analyses unless the department approves a later date.

(d) If the department determines that the results of the field tests or laboratory analyses meet the requirements of WAC 173-303-655(3), it will modify the second phase of the permit to incorporate any requirements necessary for operation of the facility in compliance with WAC 173-303-655, based upon the results of the field tests or laboratory analyses.

(i) This permit modification may proceed under WAC 173-303-830(4) or otherwise will proceed as a modification under WAC 173-303-830 (3)(a)(ii). If such modifications are necessary, the second phase of the permit will become effective only after those modifications have been made.

(ii) If no modifications of the second phase of the permit are necessary, the department will give notice of its final decision to the permit applicant and to each person who submitted written comments on the phased permit or who requested notice of the final decision on the second phase of the permit. The second phase of the permit then will become effective as specified in WAC 173-303-840 (8)(b).

(iii) Reserve.

(e) If the department determines that the results of the field tests or laboratory analyses do not meet the requirements of WAC 173-303-655(3), the second phase of the permit will not become effective, and the department will, as the situation warrants, either:

(i) Modify the permit according to WAC 173-303-830(3) to allow for additional field tests or laboratory analyses; or

(ii) Proceed to terminate the permit according to WAC 173-303-840.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-808, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-808, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-808, filed 4/18/84.]

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 173-303-695. Any such permit will include such terms and conditions as will assure protection of human health and the environment. Such permits:

(a) Will 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) Will 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) Will 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.

(3) The department may order an immediate termination of all operations at the facility at any time it 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 will be for a period of not more than one year.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-809, filed 10/19/95, effective 11/19/95. 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 permittee 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 must 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 must 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.

(a) Compliance with a final facility permit during its term constitutes compliance for the purpose of enforcement with chapter 173-303 WAC except for permit modifications and those requirements not included in the permit that:

(i) Become effective by statute;

(ii) Are adopted under 40 CFR Part 268 restricting the placement of dangerous waste in or on the land;

(iii) Are adopted under WAC 173-303-650 through 173-303-665 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, CQA programs, monitoring, action leakage rates, and response action plans, and will be implemented through the procedures of WAC 173-303-830 Class *1 permit modifications; or

(iv) Are adopted under 40 CFR Subparts AA, BB, or CC which are incorporated by reference at WAC 173-303-400 (3)(a) limiting air emissions.

(b) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

(c) 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 must 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 must also furnish to the department, upon request, copies of records required to be kept by the permit.

(10) Inspection and entry. The permittee must 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) Reserve.

(b) Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

(c) The permittee must 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 must 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;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(e) The permittee must maintain records from all ground water monitoring wells and associated ground water surface elevations for the active life of the facility, and for disposal facilities for the post-closure period as well.

(12) Signatory requirement. All applications, reports, or information submitted to the department must be signed in accordance with this subsection and must 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 will 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 must 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 must 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 must 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 must be provided:

(a) Planned changes. The permittee must 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

(Note: In certifying construction or modification, the independent qualified registered professional engineer is responsible only for certifying those portions of the facility which are identified in chapter 173-303 WAC as specifically requiring certification by an independent registered professional engineer.)

(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 must give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee may not treat, store, or dispose of dangerous waste; and for a facility being modified, the permittee may not treat, store, or dispose of dangerous waste in the modified portion of the facility except as provided in WAC 173-303-830(4).

(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) must 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 must be submitted no later than fourteen days following each scheduled date.

(f) Immediate reporting. The permittee must immediately report any noncompliance which may endanger health or the environment. Information must be provided orally to the department as soon as the permittee becomes aware of the circumstances. A written submission must 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 must 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 reoccurrence of the noncompliance.

Information which must be reported immediately must 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 must 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 must 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(4);

(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:

(i) The processes are unique to the owner/operator's business or the owner/operator's competitive position may be adversely affected if the information is released to the public or to a competitor; and

(ii) The director determines that granting the owner/operator's request is not detrimental to the public interest and is in accord with the policies and purposes of chapter 43.21A RCW.

(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 will place the unsubstantiated information in the public file.

(e) The department will determine if the owner/operator's request meets the confidential information criteria.

(16) General permit conditions. Information repository. The director may require the permittee to establish and maintain an information repository at any time, based on the factors set forth in WAC 173-303-281 (5)(b). The information repository will be governed by the provisions in WAC 173-303-281 (5)(c) through (f).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-810, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-810, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-810, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-810, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-810, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-810, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-810, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-810, filed 2/10/82.]

WAC 173-303-815 Facility-specific permit conditions. (1) **Requirements for recording and reporting of monitoring results.**

All permits must specify:

(a) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);

(b) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring;

(c) Applicable reporting requirements based upon the impact of the regulated activity and as specified in this chapter. Reporting must be no less frequent than specified in this chapter.

(2) **Establishing permit conditions.**

(a) In addition to conditions required in all permits (WAC 173-303-810 (1) through (14)), the director will establish conditions, as required on a case-by-case basis, in permits under WAC 173-303-806(11) (duration of permits), WAC 173-303-815(3) (Schedules of compliance), and WAC 173-303-815(1) (monitoring).

(b)(i) Each permit must include permit conditions necessary to achieve compliance with the Hazardous Waste Management Act chapter 70.105 RCW, this chapter and RCRA Subtitle C. In satisfying this provision, the director may incorporate applicable requirements of this chapter directly into the permit or establish other permit conditions that are based on this chapter.

(ii) Each permit issued under this chapter must contain terms and conditions as the director determines necessary to protect human health and the environment.

(iii) For a state-issued permit, an applicable requirement is a state statutory or regulatory requirement that takes effect prior to final administrative disposition of a permit. (Note: For a permit issued by EPA, an applicable requirement is a statutory or regulatory requirement (including any interim final regulation) which takes effect prior to the issuance of the permit (except as provided in 40 CFR Section 124.86(c) for RCRA permits being processed under Subpart E or F of part 124). 40 CFR Section 124.14 (reopening of comment period) provides a means for reopening EPA permit proceedings at the discretion of the director where new requirements become effective during the permitting process and are of sufficient magnitude to make additional proceedings desirable). For state and EPA administered programs, an applicable requirement is also any requirement that takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in WAC 173-303-830(3).

(iv) New or reissued permits, and to the extent allowed under WAC 173-303-830(3), modified or revoked and reissued permits, must incorporate each of the applicable requirements referenced in this subsection and in WAC 173-303-810(11).

(v) Incorporation. All permit conditions must be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements must be given in the permit.

(3) **Schedules of compliance.**

(a) The permit may, when appropriate, specify a schedule of compliance leading to compliance with this chapter.

(i) Time for compliance. Any schedules of compliance under this section require compliance as soon as possible.

(ii) Interim dates. Except as provided in (b)(i)(B) of this subsection, if a permit establishes a schedule of compliance which exceeds one year from the date of permit issuance, the schedule must set forth interim requirements and the dates for their achievement.

(A) The time between interim dates must not exceed one year.

(B) If the time necessary for completion of any interim requirement is more than one year and is not readily divisible into stages for completion, the permit must specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(iii) Reporting. The permit must be written to require that no later than fourteen days following each interim date and the final date of compliance, the permittee must notify the director in writing, of its compliance or noncompliance with the interim or final requirements.

(b) Alternative schedules of compliance. A dangerous waste permit applicant or permittee may cease conducting regulated activities (by receiving a terminal volume of hazardous waste and, for treatment and storage dangerous waste management facilities, closing pursuant to applicable requirements; and, for disposal dangerous waste management facilities, closing and conducting post-closure care pursuant to applicable requirements) rather than continue to operate and meet permit requirements as follows:

(i) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

(A) The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

(B) The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.

(ii) If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which will ensure timely compliance with applicable requirements.

(iii) If the permittee is undecided whether to cease conducting regulated activities, the director may issue or modify a permit to contain two schedules as follows:

(A) Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the decision is to continue conducting regulated activities;

(B) One schedule shall lead to timely compliance with applicable requirements;

(C) The second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements;

(D) Each permit containing two schedules shall include a requirement that after the permittee has made a final decision under (b)(iii)(A) of this subsection it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.

(iv) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the director, such as resolution of the board of directors of a corporation.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-815, filed 1/12/98, effective 2/12/98. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-815, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-815, filed 2/10/82.]

WAC 173-303-820 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-820, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-820, filed 2/10/82.]

WAC 173-303-825 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-825, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-825, filed 2/10/82.]

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 direc-

tor. This section does not apply to permits by rule or interim status permits.

(2) Transfer of permits.

(a) 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 (b) of this subsection or subsection (3) of this section) to identify the new permittee and incorporate such other requirements as may be necessary under the appropriate act.

(b) Changes in the ownership or operational control of a facility may be made as a Class 1 modification with prior written approval of the director in accordance with subsection (4) of this section. The new owner or operator must submit a revised permit application no later than ninety days prior to the scheduled change. A written agreement containing a specific date for transfer of permit responsibility between the current and new permittees must also be submitted to the director. When a transfer of ownership or operational control occurs, the old owner or operator must comply with the requirements of WAC 173-303-620 (Financial requirements) until the new owner or operator has demonstrated that he or she 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 of ownership or operational control of the facility. Upon demonstration to the director by the new owner or operator of compliance with the financial requirements, the director will notify the old owner or operator that he or she no longer needs to comply with the financial requirements as of the date of demonstration.

(3) Modification or revocation and reissuance of permits. When the director receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit, receives a request for revocation and reissuance, or conducts a review of the permit file), the director 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 director may modify or revoke and reissue the permit accordingly, subject to the limitations of (c) of this subsection, and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. All other aspects of the existing permit remain in effect for the duration of the unmodified permit. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. During any revocation and reissuance proceeding, the permittee must comply with all conditions of the existing permit until a new final permit is reissued. If cause does not exist under this subsection, the director will not modify or revoke and reissue the permit, except on request of the permittee. If a permit modification is requested by the permittee, the director will approve or deny the request according to the procedures of subsection (4) of this section. 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; the following may be causes for revocation and reissuance, as well as modification, when the permittee requests or agrees:

(i) Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;

(ii) Information. Permits may be modified during their terms if the director receives information that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance;

(iii) New statutory requirements or regulations. The standards or regulations on which the permit was based have been changed by statute, through adoption of new or amended standards or regulations or by judicial decision after the permit was issued.

(iv) Compliance schedules. The director determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage, or other events over which the permittee has little or no control and for which there is no reasonably available remedy;

(v) Notwithstanding any other provision in this section, when a permit for a land disposal facility is reviewed by the director under 173-303-806 (11)(d), the director will modify the permit as necessary to assure that the facility continues to comply with the currently applicable requirements in this chapter.

(b) Causes for modification or revocation and reissuance. The following are causes to modify, or alternatively, revoke and reissue a permit:

(i) Cause exists for termination under WAC 173-303-830(5) for final facility permits, and the director determines that modification or revocation and reissuance is appropriate; or

(ii) The director has received notification of a proposed transfer of the permit.

(c) Reserve.

(4) Permit modification at the request of the permittee.

(a) Class 1 modifications.

(i) Except as provided in (a)(ii) of this subsection, the permittee may put into effect Class 1 modifications listed in Appendix I of this section under the following conditions:

(A) The permittee must notify the director concerning the modification by certified mail or other means that establish proof of delivery within seven calendar days after the change is put into effect. This notice must specify the changes being made to permit conditions or supporting documents referenced by the permit and must explain why they are necessary. Along with the notice, the permittee must provide the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(B) The permittee must send a notice of the modification to all persons on the facility mailing list, maintained by the director in accordance with WAC 173-303-840 (3)(e)(i)(D), and the appropriate units of state and local government, as specified in WAC 173-303-840 (3)(e)(i)(E). This notification must be made within ninety calendar days after the change is put into effect. For the Class 1 modifications that require prior director approval, the notification must be made within ninety calendar days after the director approves the request.

(C) Any person may request the director to review, and the director may for cause reject, any Class 1 modification. The director must inform the permittee by certified mail that a Class 1 modification has been rejected, explaining the reasons for the rejection. If a Class 1 modification has been rejected, the permittee must comply with the original permit conditions.

(ii) Class 1 permit modifications identified in Appendix I by an asterisk may be made only with the prior written approval of the director.

(iii) For a Class 1 permit modification, the permittee may elect to follow the procedures in (b) of this subsection for Class 2 modifications instead of the Class 1 procedures. The permittee must inform the director of this decision in the notice required in (b)(i) of this subsection.

(b) Class 2 modifications.

(i) For Class 2 modifications, listed in Appendix I of this section, the permittee must submit a modification request to the director that:

(A) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

(B) Identifies that the modification is a Class 2 modification;

(C) Explains why the modification is needed; and

(D) Provides the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(ii) The permittee must send a notice of the modification request to all persons on the facility mailing list maintained by the director and to the appropriate units of state and local government as specified in WAC 173-303-840 (3)(e)(i)(E) and must publish this notice in a major local newspaper of general circulation. This notice must be mailed and published within seven days before or after the date of submission of the modification request, and the permittee must provide to the director evidence of the mailing and publication. The notice must include:

(A) Announcement of a sixty-day comment period, in accordance with (b)(v) of this subsection, and the name and address of a departmental contact to whom comments must be sent;

(B) Announcement of the date, time, and place for a public meeting held in accordance with (b)(iv) of this subsection;

(C) Name and telephone number of the permittee's contact person;

(D) Name and telephone number of a departmental contact person;

(E) Location where copies of the modification request and any supporting documents can be viewed and copied; and

(F) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the department of ecology contact person."

(iii) The permittee must place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

(iv) The permittee must hold a public meeting no earlier than fifteen days after the publication of the notice required in (b)(ii) of this subsection and no later than fifteen days before the close of the sixty-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

(v) The public will be provided sixty days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the department of ecology contact identified in the public notice.

(vi)(A) No later than ninety days after receipt of the notification request, the director must:

(I) Approve the modification request, with or without changes, and modify the permit accordingly;

(II) Deny the request;

(III) Determine that the modification request must follow the procedures in (c) of this subsection for Class 3 modifications for the following reasons:

(AA) There is significant public concern about the proposed modification; or

(BB) The complex nature of the change requires the more extensive procedures of Class 3;

(IV) Approve the request, with or without changes, as a temporary authorization having a term of up to one hundred eighty days; or

(V) Notify the permittee that he or she will decide on the request within the next thirty days.

(B) If the director notifies the permittee of a thirty-day extension for a decision, the director must, no later than one hundred twenty days after receipt of the modification request:

(I) Approve the modification request, with or without changes, and modify the permit accordingly;

(II) Deny the request; or

(III) Determine that the modification request must follow the procedures in (c) of this subsection for Class 3 modifications for the following reasons:

(AA) There is significant public concern about the proposed modification; or

(BB) The complex nature of the change requires the more extensive procedures of Class 3.

(IV) Approve the request, with or without changes, as a temporary authorization having a term of up to one hundred eighty days.

(C) If the director fails to make one of the decisions specified in (b)(vi)(B) of this subsection by the one hundred twentieth day after receipt of the modification request, the permittee is automatically authorized to conduct the activities described in the modification request for up to one hundred eighty days, without formal departmental action. The authorized activities must be conducted as described in the permit modification request and must be in compliance with all appropriate standards of 40 CFR Part 265 (as referenced by WAC 173-303-400). If the director approves, with or without changes, or denies the modification request during the term of the temporary or automatic authorization provided for in (b)(vi)(A), (B), or (C) of this subsection, such action cancels the temporary or automatic authorization.

(D)(I) In the case of an automatic authorization under (b)(vi)(C) of this subsection, or a temporary authorization under (b)(vi)(A)(IV) or (B)(IV) of this subsection, if the director has not made a final approval or denial of the modi-

fication request by the date fifty days prior to the end of the temporary or automatic authorization, the permittee must within seven days of that time send a notification to persons on the facility mailing list, and make a reasonable effort to notify other persons who submitted written comments on the modification request, that:

(AA) The permittee has been authorized temporarily to conduct the activities described in the permit modification request; and

(BB) Unless the director acts to give final approval or denial of the request by the end of the authorization period, the permittee will receive authorization to conduct such activities for the life of the permit.

(II) If the owner/operator fails to notify the public by the date specified in (b)(vi)(D)(I) of this subsection, the effective date of the permanent authorization will be deferred until fifty days after the owner/operator notifies the public.

(E) Except as provided in (b)(vi)(G) of this subsection, if the director does not finally approve or deny a modification request before the end of the automatic or temporary authorization period or reclassify the modification as a Class 3, the permittee is authorized to conduct the activities described in the permit modification request for the life of the permit unless modified later under subsection (3) or (4) of this section. The activities authorized under this subsection (b)(vi)(E) must be conducted as described in the permit modification request and must be in compliance with all appropriate standards of 40 CFR Part 265 (as referenced by WAC 173-303-400).

(F) In making a decision to approve or deny a modification request, including a decision to issue a temporary authorization or to reclassify a modification as a Class 3, the director must consider all written comments submitted during the public comment period and must respond in writing to all significant comments in his or her decision.

(G) With the written consent of the permittee, the director may extend indefinitely or for a specified period the time periods for final approval or denial of a modification request or for reclassifying a modification as a Class 3.

(vii) The director may deny or change the terms of a Class 2 permit modification request under (b)(6)(i) through (iii) of this subsection for the following reasons:

(A) The modification request is incomplete;

(B) The requested modification does not comply with the appropriate requirements of WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680 or other applicable requirements; or

(C) The conditions of the modification fail to protect human health and the environment.

(viii) The permittee may perform any construction associated with a Class 2 permit modification request beginning sixty days after the submission of the request unless the director establishes a later date for commencing construction and informs the permittee in writing before day sixty.

(c) Class 3 modifications.

(i) For Class 3 modifications listed in Appendix I of this section, the permittee must submit a modification request to the director that:

(A) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

(B) Identifies that the modification is a Class 3 modification;

(C) Explains why the modification is needed; and

(D) Provides the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(ii) The permittee must send a notice of the modification request to all persons on the facility mailing list maintained by the director and to the appropriate units of state and local government as specified in WAC 173-303-840 (3)(e)(i)(D) and must publish this notice in a major local newspaper of general circulation. This notice must be mailed and published within seven days before or after the date of submission of the modification request, and the permittee must provide to the director evidence of the mailing and publication. The notice must include:

(A) Announcement of a sixty-day comment period, and a name and address of an agency contact to whom comments must be sent;

(B) Announcement of the date, time, and place for a public meeting on the modification request, in accordance with (c)(4) of this subsection;

(C) Name and telephone number of the permittee's contact person;

(D) Name and telephone number of a departmental contact person;

(E) Location where copies of the modification request and any supporting documents can be viewed and copied; and

(F) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the department of ecology contact person."

(iii) The permittee must place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

(iv) The permittee must hold a public meeting no earlier than fifteen days after the publication of the notice required in (c)(ii) of this subsection and no later than fifteen days before the close of the sixty-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

(v) The public will be provided at least sixty days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the department of ecology contact identified in the notice.

(vi) After the conclusion of the sixty-day comment period, the director must grant or deny the permit modification request according to the permit modification procedures of WAC 173-303-840. In addition, the director must consider and respond to all significant written comments received during the sixty-day comment period.

(d) Other modifications.

(i) In the case of modifications not explicitly listed in Appendix I of this section, the permittee may submit a Class 3 modification request to the department, or he or she may

request a determination by the director that the modification should be reviewed and approved as a Class 1 or Class 2 modification. If the permittee requests that the modification be classified as a Class 1 or 2 modification, he or she must provide the department with the necessary information to support the requested classification.

(ii) The director will make the determination described in (d)(i) of this subsection as promptly as practicable. In determining the appropriate class for a specific modification, the director will consider the similarity of the modification to other modifications codified in Appendix I and the following criteria:

(A) Class 1 modifications apply to minor changes that keep the permit current with routine changes to the facility or its operation. These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment. In the case of Class 1 modifications, the director may require prior approval.

(B) Class 2 modifications apply to changes that are necessary to enable a permittee to respond, in a timely manner, to:

(I) Common variations in the types and quantities of the wastes managed under the facility permit;

(II) Technological advancements; and

(III) Changes necessary to comply with new regulations, where these changes can be implemented without substantially changing design specifications or management practices in the permit.

(C) Class 3 modifications substantially alter the facility or its operation.

(e) Temporary authorizations.

(i) Upon request of the permittee, the director may, without prior public notice and comment, grant the permittee a temporary authorization in accordance with this subsection. Temporary authorizations must have a term of not more than one hundred eighty days.

(ii)(A) The permittee may request a temporary authorization for:

(I) Any Class 2 modification meeting the criteria in (e)(iii)(B) of this subsection; and

(II) Any Class 3 modification that meets the criteria in (e)(iii)(B)(I) or (II) of this subsection; or that meets the criteria in (e)(iii)(B)(III) through (V) of this subsection and provides improved management or treatment of a dangerous waste already listed in the facility permit.

(B) The temporary authorization request must include:

(I) A description of the activities to be conducted under the temporary authorization;

(II) An explanation of why the temporary authorization is necessary; and

(III) Sufficient information to ensure compliance with the standards in WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680.

(C) The permittee must send a notice about the temporary authorization request to all persons on the facility mailing list maintained by the director and to appropriate units of state and local governments as specified in WAC 173-303-840 (3)(e)(i)(D). This notification must be made within seven days of submission of the authorization request.

(iii) The director will approve or deny the temporary authorization as quickly as practical. To issue a temporary authorization, the director must find:

(A) The authorized activities are in compliance with the standards of WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680.

(B) The temporary authorization is necessary to achieve one of the following objectives before action is likely to be taken on a modification request:

(I) To facilitate timely implementation of closure or corrective action activities;

(II) To allow treatment or storage in tanks, containers, or in containment buildings in accordance with 40 CFR Part 268;

(III) To prevent disruption of ongoing waste management activities;

(IV) To enable the permittee to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or

(V) To facilitate other changes to protect human health and the environment.

(iv) A temporary authorization may be reissued for one additional term of up to one hundred eighty days provided that the permittee has requested a Class 2 or 3 permit modification for the activity covered in the temporary authorization, and:

(A) The reissued temporary authorization constitutes the director's decision on a Class 2 permit modification in accordance with (b)(vi)(A)(IV) or (B)(IV) of this subsection; or

(B) The director determines that the reissued temporary authorization involving a Class 3 permit modification request is warranted to allow the authorized activities to continue while the modification procedures of (c) of this subsection are conducted.

(f) Public notice and appeals of permit modification decisions.

(i) The director will notify persons on the facility mailing list and appropriate units of state and local government within ten days of any decision under this section to grant or deny a Class 2 or 3 permit modification request. The director will also notify such persons within ten days after an automatic authorization for a Class 2 modification goes into effect under (b)(vi)(C) or (E) of this subsection.

(ii) The director's decision to grant or deny a Class 2 or 3 permit modification request under this section may be appealed under the permit appeal procedures of WAC 173-303-845.

(iii) An automatic authorization that goes into effect under (b)(vi)(C) or (E) of this subsection may be appealed under the permit appeal procedures of WAC 173-303-845; however, the permittee may continue to conduct the activities pursuant to the automatic authorization until the appeal has been granted pursuant to WAC 173-303-845, notwithstanding the provisions of WAC 173-303-840 (8)(b).

(g) Newly regulated wastes and units.

(i) The permittee is authorized to continue to manage wastes listed or identified as dangerous under WAC 173-303-070, or to continue to manage dangerous waste in units newly regulated as dangerous waste management units, if:

(A) The unit was in existence as a dangerous waste facility with respect to the newly listed or identified waste or newly regulated waste management unit on the effective date of the final rule listing or identifying the waste, or regulating the unit;

(B) The permittee submits a Class 1 modification request on or before the date on which the waste or unit becomes subject to the new requirements;

(C) The permittee is in compliance with the applicable standards of 40 CFR Part 265 (as referenced in WAC 173-303-400) and Part 266 (as referenced in WAC 173-303-510);

(D) The permittee also submits a complete Class 2 or 3 permit modification request within one hundred eighty days of the effective date of the rule listing or identifying the waste, or subjecting the unit to management standards under this chapter; and

(E) In the case of land disposal units, the permittee certifies that each such unit is in compliance with all applicable requirements of 40 CFR Part 265 for ground water monitoring and financial responsibility (as referenced in WAC 173-303-400) on the date twelve months after the effective date of the rule identifying or listing the waste as dangerous, or regulating the unit as a dangerous waste management unit. If the owner or operator fails to certify compliance with all these requirements, he or she will lose authority to operate under this section.

(ii) New wastes or units added to a facility's permit under this subsection do not constitute expansions for the purpose of the twenty-five percent capacity expansion limit for Class 2 modifications.

(h) Military dangerous waste munitions treatment and disposal. The permittee is authorized to continue to accept waste military munitions notwithstanding any permit conditions barring the permittee from accepting off-site wastes, if:

(i) The facility was in existence as a dangerous waste facility, and the facility was already permitted to handle the waste military munitions, on the date when the waste military munitions became subject to dangerous waste regulatory requirements;

(ii) On or before the date when the waste military munitions become subject to dangerous waste regulatory requirements, the permittee submits a Class 1 modification request to remove or amend the permit provision restricting the receipt of off-site waste munitions; and

(iii) The permittee submits a complete Class 2 modification request within one hundred eighty days of the date when the waste military munitions became subject to dangerous waste regulatory requirements.

(i) Permit modification list. The director must maintain a list of all approved permit modifications and must publish a notice once a year in a statewide newspaper that an updated list is available for review.

APPENDIX I

Modifications	Class
A. General Permit Provisions	
1. Administrative and informational changes	1
2. Correction of typographical errors	1
3. Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls)	1
4. Changes in the frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee:	
a. To provide for more frequent monitoring, reporting, sampling, or maintenance	1
b. Other changes	2
5. Schedule of compliance:	
a. Changes in interim compliance dates, with prior approval of the director	[1]1
b. Extension of final compliance date	3
6. Changes in expiration date of permit to allow earlier permit termination, with prior approval of the director	[1]1
7. Changes in ownership or operational control of a facility, provided the procedures of subsection (2)(b) of this section are followed	[1]1
B. General Facility Standards	
1. Changes to waste sampling or analysis methods:	
a. To conform with agency guidance or regulations	1
b. To incorporate changes associated with F039 (multisource leachate) sampling or analysis methods	[1]1
c. To incorporate changes associated with underlying dangerous constituents in ignitable or corrosive wastes	[1]1
d. Other changes	2
2. Changes to analytical quality assurance/control plan:	
a. To conform with agency guidance or regulations	1
b. Other changes	2
3. Changes in procedures for maintaining the operating record	1
4. Changes in frequency or content of inspection schedules	2
5. Changes in the training plan:	
a. That affect the type or decrease the amount of training given to employees	2
b. Other changes	1
6. Contingency plan:	
a. Changes in emergency procedures (i.e., spill or release response procedures)	2
b. Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed	1
c. Removal of equipment from emergency equipment list	2
d. Changes in name, address, or phone number of coordinators or other persons or agencies identified in the plan	1
7. Construction quality assurance plan:	
a. Changes that the CQA officer certifies in the operating record will provide equivalent or better certainty that the unit components meet the design specification	1
b. Other changes	2

Note: When a permit modification (such as introduction of a new unit) requires a change in facility plans or other general facility standards, that change will be reviewed under the same procedures as the permit modification.

C. Ground Water Protection

1. Changes to wells:

a. Changes in the number, location, depth, or design of upgradient or downgradient wells of permitted ground water monitoring system 2

b. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well 1

2. Changes in ground water sampling or analysis procedures or monitoring schedule, with prior approval of the director . . . . . [1]1

3. Changes in statistical procedure for determining whether a statistically significant change in ground water quality between upgradient and downgradient wells has occurred, with prior approval of the director . . . . . [1]1

4. Changes in point of compliance . . . . . [1]2

5. Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs):

a. As specified in the ground water protection standard 3

b. As specified in the detection monitoring program 2

6. Changes to a detection monitoring program as required by WAC 173-303-645 (9)(j), unless otherwise specified in this appendix 2

7. Compliance monitoring program:

a. Addition of compliance monitoring program as required by WAC 173-303-645 (9)(h)(iv) and (10) 3

b. Changes to a compliance monitoring program as required by WAC 173-303-645 (10)(k), unless otherwise specified in this appendix 2

8. Corrective action program:

a. Addition of a corrective action program as required by WAC 173-303-645 (10)(i)(ii) and (11) 3

b. Changes to a corrective action program as required by WAC 173-303-645 (11)(h), unless otherwise specified in this appendix 2

D. Closure

1. Changes to the closure plan:

a. Changes in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility, with prior approval of the director . . . . . [1]1

b. Changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period, with prior approval of the director . . . . . [1]1

c. Changes in the expected year of final closure, where other permit conditions are not changed, with prior approval of the director . . . . . [1]1

d. Changes in procedures for decontamination of facility equipment or structures, with prior approval of the director . . . . . [1]1

e. Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this appendix 2

f. Extension of the closure period to allow a landfill, surface impoundment, or land treatment unit to receive nondangerous wastes after final receipt of dangerous wastes under WAC 173-303-610 (4)(d) and (e) 2

2. Creation of a new landfill unit as part of closure 3

3. Addition of the following new units to be used temporarily for closure activities:

a. Surface impoundments 3

b. Incinerators 3

c. Waste piles that do not comply with WAC 173-303-660 (1)(c) 3

d. Waste piles that comply with WAC 173-303-660 (1)(c) 2

e. Tanks or containers (other than specified below) 2

f. Tanks used for neutralization, dewatering, phase separation, or component separation, with prior approval of the director . . . . . [1]1

g. Staging piles 2

E. Post-Closure

1. Changes in name, address, or phone number of contact in post-closure plan 1

2. Extension of post-closure care period 2

3. Reduction in the post-closure care period 3

4. Changes to the expected year of final closure, where other permit conditions are not changed 1

5. Changes in post-closure plan necessitated by events occurring during the active life of the facility, including partial and final closure 2

F. Containers

1. Modification or addition of container units:

a. Resulting in greater than 25% increase in the facility's container storage capacity, except as provided in F (1)(c) and F (4)(a) below 3

b. Resulting in up to 25% increase in the facility's container storage capacity, except as provided in F (1)(c) and F (4)(a) below 2

c. Or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), with prior approval of the director. This modification may also involve addition of new waste codes or narrative descriptions of wastes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) . . . . . [1]1

2:

a. Modification of a container unit without increasing the capacity of the unit 2

b. Addition of a roof to a container unit without alteration of the containment system 1

3. Storage of different wastes in containers:

a. That require additional or different management practices from those authorized in the permit, except as provided in F(4) below 3

b. That do not require additional or different management practices from those authorized in the permit 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

4. Storage or treatment of different wastes in containers:

a. That require addition of units or change in treatment process or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) ..... [1]1

b. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

G. Tanks

1:

a. Modification or addition of tank units resulting in greater than 25% increase in the facility's tank capacity, except as provided in G (1)(c), G (1)(d), and G (1)(e) below 3

b. Modification or addition of tank units resulting in up to 25% increase in the facility's tank capacity, except as provided in G (1)(d) and G (1)(e) below 2

c. Addition of a new tank that will operate for more than 90 days using any of the following physical or chemical treatment technologies: Neutralization, dewatering, phase separation, or component separation 2

d. After prior approval of the director, addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: Neutralization, dewatering, phase separation, or component separation ..... [1]1

e. Modification or addition of tank units or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), with prior approval of the director. This modification may also involve addition of new waste codes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) ..... [1]1

2. Modification of a tank unit or secondary containment system without increasing the capacity of the unit 2

3. Replacement of a tank with a tank that meets the same design standards and has a capacity within +/- 10% of the replaced tank provided 1

-The capacity difference is no more than 1500 gallons,

-The facility's permitted tank capacity is not increased, and

-The replacement tank meets the same conditions in the permit.

4. Modification of a tank management practice 2

5. Management of different wastes in tanks:

a. That require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process from that authorized in the permit, except as provided in G (5)(c) below 3

b. That do not require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process than authorized in the permit, except as provided in G (5)(d) .. 2

c. That require addition of units or change in treatment processes or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii). The modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) ..... [1]1

(d) That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received waste of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

H. Surface Impoundments

1. Modification or addition of surface impoundment units that result in increasing the facility's surface impoundment storage or treatment capacity 3

2. Replacement of a surface impoundment unit 3

3. Modification of a surface impoundment unit without increasing the facility's surface impoundment storage or treatment capacity and without modifying the unit's liner, leak detection system, or leachate collection system 2

4. Modification of a surface impoundment management practice 2

5. Treatment, storage, or disposal of different wastes in surface impoundments:

a. That require additional or different management practices or different design of the liner or leak detection system than authorized in the permit 3

b. That do not require additional or different management practices or different design of the liner or leak detection system than authorized in the permit 2

c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), and provided that the unit meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a unit that meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2), and provided further that the surface impoundment has previously received wastes of the same type (for example, incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

6. Modifications of unconstructed units to comply with WAC 173-303-650 (2)(j), (10), (11), and (4)(d) *1

7. Changes in response action plan:

a. Increase in action leakage rate 3
b. Change in a specific response reducing its frequency or effectiveness 3
c. Other changes 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

I. Enclosed Waste Piles. For all waste piles except those complying with WAC 173-303-660 (1)(c), modifications are treated the same as for a landfill. The following modifications are applicable only to waste piles complying with WAC 173-303-660 (1)(c).

1. Modification or addition of waste pile units:
a. Resulting in greater than 25% increase in the facility's waste pile storage or treatment capacity 3
b. Resulting in up to 25% increase in the facility's waste pile storage or treatment capacity 2
2. Modification of waste pile unit without increasing the capacity of the unit 2
3. Replacement of a waste pile unit with another waste pile unit of the same design and capacity and meeting all waste pile conditions in the permit 1
4. Modification of a waste pile management practice 2
5. Storage or treatment of different wastes in waste piles:
a. That require additional or different management practices or different design of the unit 3
b. That do not require additional or different management practices or different design of the unit 2
6. Conversion of an enclosed waste pile to a containment building unit 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

J. Landfills and Unenclosed Waste Piles

1. Modification or addition of landfill units that result in increasing the facility's disposal capacity 3
2. Replacement of a landfill 3
3. Addition or modification of a liner, leachate collection system, leachate detection system, run-off control, or final cover system 3
4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, run-off control, or final cover system 2
5. Modification of a landfill management practice 2
6. Landfill different wastes:
a. That require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system 3
b. That do not require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system 2
c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), and provided that the landfill unit meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1
d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a landfill unit that meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2), and provided further that the landfill has previously received wastes of the same type (for example, incinerator ash). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1
7. Modifications of unconstructed units to comply with WAC 173-303-660 (2)(j), (11), (12), (5)(c), 173-303-665 (2)(h), (8), (4)(c), and (9) *1
8. Changes in response action plan:
a. Increase in action leakage rate 3
b. Change in a specific response reducing its frequency or effectiveness. 3
c. Other changes 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

K. Land Treatment

1. Lateral expansion of or other modification of a land treatment unit to increase areal extent 3
2. Modification of run-on control system 2
3. Modify run-off control system 3
4. Other modifications of land treatment unit component specifications or standards required in permit 2
5. Management of different wastes in land treatment units:
a. That require a change in permit operating conditions or unit design specifications 3
b. That do not require a change in permit operating conditions or unit design specifications 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

6. Modification of a land treatment unit management practice to:
a. Increase rate or change method of waste application 3
b. Decrease rate of waste application 2
7. Modification of a land treatment unit management practice to change measures of pH or moisture content, or to enhance microbial or chemical reactions 2
8. Modification of a land treatment unit management practice to grow food chain crops, to add to or replace existing permitted crops with different food chain crops, or to modify operating plans for distribution of animal feeds resulting from such crops 3

9. Modification of operating practice due to detection of releases from the land treatment unit pursuant to WAC 173-303-655 (6)(g)(ii) 3

10. Changes in the unsaturated zone monitoring system, resulting in a change to the location, depth, number of sampling points, or replace unsaturated zone monitoring devices or components of devices with devices or components that have specifications different from permit requirements ... 3

11. Changes in the unsaturated zone monitoring system that do not result in a change to the location, depth, number of sampling points, or that replace unsaturated zone monitoring devices or components of devices with devices or components having specifications different from permit requirements 2

12. Changes in background values for hazardous constituents in soil and soil-pore liquid 2

13. Changes in sampling, analysis, or statistical procedure 2

14. Changes in land treatment demonstration program prior to or during the demonstration 2

15. Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the director's prior approval has been received 2

16. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the director 2

17. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration 3

18. Changes in vegetative cover requirements for closure 2

L. Incinerators, Boilers, and Industrial Furnaces

1. Changes to increase by more than 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

2. Changes to increase by up to 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 2

3. Modification of an incinerator, boiler, or industrial furnace unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove HCl/Cl_2, metals, or particulate from the combustion gases, or by changing other features of the incinerator, boiler, or industrial furnace that could affect its capability to meet the regulatory performance standards. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

4. Modification of an incinerator, boiler, or industrial furnace unit in a manner that would not likely affect the capability of the unit to meet the regulatory performance standards but which would change the operating conditions or monitoring requirements specified in the permit. The director may require a new trial burn to demonstrate compliance with the regulatory performance standards 2

5. Operating requirements:

a. Modification of the limits specified in the permit for minimum or maximum combustion gas temperature, minimum combustion gas residence time, oxygen concentration in the secondary combustion chamber flue gas carbon monoxide and hydrocarbon concentration, maximum temperature at the inlet to the particulate matter emission control system, or operating parameters for the air pollution control system. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

b. Modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls 3

c. Modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit 2

6. Burning different wastes:

a. If the waste contains a POHC that is more difficult to burn than authorized by the permit or if burning of the waste requires compliance with different regulatory performance standards than specified in the permit. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

b. If the waste does not contain a POHC that is more difficult to burn than authorized by the permit and if burning of the waste does not require compliance with different regulatory performance standards than specified in the permit .. 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

7. Shakedown and trial burn:

a. Modification of the trial burn plan or any of the permit conditions applicable during the shakedown period for determining operational readiness after construction, the trial burn period, or the period immediately following the trial burn 2

b. Authorization of up to an additional 720 hours of waste burning during the shakedown period for determining operational readiness after construction, with the prior approval of the director ..... [1]1

c. Changes in the operating requirements set in the permit for conducting a trial burn, provided the change is minor and has received the prior approval of the director ..... [1]1

d. Changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided the change is minor and has received the prior approval of the director ..... [1]1

8. Substitution of an alternate type of nondangerous fuel that is not specified in the permit 1

M. Containment Buildings

1. Modification or addition of containment building units:

a. Resulting in greater than 25% increase in the facility's containment building storage or treatment capacity..... 3

b. Resulting in up to 25% increase in the facility's containment building storage or treatment capacity. 2

2. Modification of a containment building unit or secondary containment system without increasing the capacity of the unit. 2

3. Replacement of a containment building with a containment building that meets the same design standards provided:

a. The unit capacity is not increased. 1

b. The replacement containment building meets the same conditions in the permit. 1

4. Modification of a containment building management practice. 2

5. Storage or treatment of different wastes in containment buildings:

a. That require additional or different management practices. 3

b. That do not require additional or different management practices. 2

N. Corrective Action

1. Approval of a corrective action management unit pursuant to WAC 173-303-646 (4), (5), and (6) 3

2. Approval of a temporary unit or time extension for a temporary unit pursuant to WAC 173-303-646(7) 2

3. Approval of a staging pile or staging pile operating term extension 2

4. Modification to incorporate a corrective action order issued pursuant to MTCA 3

5. Modification or amendment of a corrective action order issued pursuant to MTCA when the MTCA public participation requirements are met and order has already been incorporated by reference into the permit 1

[1]Class 1 modifications requiring prior Agency approval

(5) Permit termination. The director will 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.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-830, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-830, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-830, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-830, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-830, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-830, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-830, filed 6/26/87; 84-09-088 (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 173-303-840 Procedures for decision making.

(1) Application and completeness.

(a) The department will not begin the processing of a permit until the applicant has fully complied with the application requirements for the permit. Permit applications must comply with the signature and certification requirements of WAC 173-303-810 (12) and (13).

(b) The department will review for completeness each application for a permit under this chapter. Each application for a permit should be reviewed for completeness within sixty days of its receipt. Upon completing the review, the department will notify the applicant in writing whether or not the application is complete. If the application is incomplete, the department will list the information necessary to make the application complete, and will specify in the notice of deficiency a date for submitting the necessary information. After the application is completed, the department may request additional information from an applicant but only when necessary to clarify, modify, or supplement previously submitted material. Requests for such additional information will not render an application incomplete.

(c) If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied and appropriate enforcement actions may be taken under chapter 70.105 RCW.

(d) If the department decides that a site visit is necessary for any reason in conjunction with the processing of an application, then the department will notify the applicant and a date will be scheduled.

(e) The effective date of an application is the date on which the department notifies the applicant that the application is complete as provided in (b) of this subsection.

(2) Draft permits.

(a) A draft permit is a document prepared by the department indicating the tentative decision to issue, deny, modify, revoke and reissue, or terminate a permit.

(b) When an application is complete, the department will tentatively decide whether to prepare a draft permit, or to deny the application.

(c) If the department tentatively decides to deny the permit application, then the department will issue a notice of intent to deny. A notice of intent to deny the permit application is a type of draft permit which follows the same procedures as any draft permit prepared under this subsection. If the department's final decision is that the tentative decision to deny was incorrect, then the department will withdraw the notice of intent to deny and proceed to prepare a draft permit under this subsection.

(d) If the department decides to prepare a draft permit, it will contain the following information:

(i) All conditions applicable to permits under WAC 173-303-810 and 173-303-815 including compliance and monitoring requirements;

(ii) Applicable conditions under WAC 173-303-830 and 173-303-815; and

(iii) All applicable standards for storage, treatment and disposal, and other permit conditions.

(e) All draft permits must be accompanied by a fact sheet that is supported by administrative record and made available for public comment.

(f) Fact sheet; statement of basis.

(i) A fact sheet will be prepared for every draft permit for a major dangerous waste management facility, and for every draft permit which the department finds is the subject of wide-spread public interest or raises major issues.

(ii) The fact sheet will briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The department will send this fact sheet to the applicant and, on request, to any other person.

(iii) The fact sheet will include, when applicable:

(A) A brief description of the type of facility or activity which is the subject of the draft permit;

(B) The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed, injected, emitted, or discharged;

(C) A brief summary of the basis for the draft permit conditions including supporting references;

(D) Reasons why any requested variances or alternatives to required standards do or do not appear justified; and

(E) A description of the procedures for reaching a final decision on the draft permit including:

(I) The beginning and ending dates of the comment period and the address where comments will be received;

(II) Procedures for requesting a hearing and the nature of that hearing;

(III) Any other procedures by which the public may participate in the final decision; and

(IV) Name and telephone number of a person to contact for additional information.

(iv) The department will prepare a statement of basis for every draft permit for which a fact sheet is not prepared. The statement of basis will briefly describe the derivation of the conditions of the draft permit and the reasons for them or, in the case of notices of intent to deny or terminate, reasons supporting the tentative decision. The statement of basis will be sent to the applicant and, on request, to any other person.

(3) Public notice and involvement.

(a) The department will give public notice that the following actions have occurred:

(i) A draft permit has been prepared or an application is tentatively being denied;

(ii) A hearing on a permit has been scheduled; or

(iii) An appeal on a permit has been filed with the pollution control hearings board.

Note: Additional public notice requirements for permitting at the pre-application and application stages are at WAC 173-303-281 (3) through (5).

(b) No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied. A written notice of the denial will be given to the person who requested the permit change and to the permittee.

(c) The public notice may describe more than one permit or permit action.

(d) Public notice of the preparation of a draft permit, including a notice of intent to deny a permit application will allow at least forty-five days for public comment. Public notice of a public hearing will be given at least thirty days before the hearing.

(e) Public notice of activities described in this subsection will be given by the following methods:

(i) By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this paragraph may waive his or her rights to receive notice for any classes and categories of permits):

(A) The applicant;

(B) Any other agency which the department knows has issued or is required to issue a permit for the same activity or facility;

(C) Federal and state agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management plans, the advisory council on historic preservation, state historic preservation officers, including any affected states (Indian tribes) (for purposes of this paragraph and in the context of the Underground Injection Control Program only, the term state includes Indian tribes treated as states);

(D) Persons on the mailing list developed by:

(I) Including those who request in writing to be on the list;

(II) Soliciting persons for an area list from participants in past permit proceedings in that area; and

(III) Notifying the public of the opportunity to be put on the mailing list through periodic publications in the public press and in appropriate publications of the department;

(E) Any unit of local government having jurisdiction over the area where the facility is proposed to be located, and each state agency having any authority under state law with respect to construction or operation of such facility;

(ii) For major permits, by publication of a notice in a daily or weekly newspaper within the area affected by the facility;

(iii) For all permits, by publication of notice in a daily or weekly major local newspaper of general circulation, and local radio broadcast of the public notice; and

(iv) By any other method reasonably calculated to give notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(4) Contents of the public notice.

(a) All public notices issued will contain the following minimum information:

(i) Name and address of the office processing the permit action for which notice is being given;

(ii) Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit;

(iii) A brief description of the business conducted at the facility or activity described in the permit application or the draft permit;

(iv) Name, address, and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit, fact sheet or statement of basis, and the application;

(v) A brief description of the comment procedures and the time and place of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision;

(vi) And any additional information considered necessary or proper.

(b) In addition to the general public notice described in (a) of this subsection, public notice of a hearing under subsection (5) of this section will contain the following information:

(i) Date, time, and place of the hearing;

(ii) Reference to the date of the previous public notice relating to the permit; and

(iii) A brief description of the nature and purpose of the hearing including the applicable rules and procedures.

(c) In addition to the general public notice all persons identified in WAC 173-303-840 (3)(e)(i)(A), (B), and (C) will be mailed a copy of the fact sheet, the permit application (if any), and the draft permit (if any).

(d) Public comments and request for public hearings. During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing must be in writing and must state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and will be answered according to WAC 173-303-840(9).

(5) Public hearings.

(a) The department will hold a public hearing whenever, on the basis of requests, there is a significant degree of public interest in a draft permit or there is written notice of opposition and the director receives a request for a hearing during the forty-five day comment period. The department also may hold a public hearing at its discretion, whenever, for instance, such a hearing might clarify one or more issues involved in the permit decision. Public notice of the hearing will be given as specified in WAC 173-303-840(3). Whenever possible, the department will schedule a public hearing under this subsection at a location convenient to the nearest population center to the proposed facility.

(b) Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. The public comment period under WAC 173-303-840(3) will automatically be extended to the close of any public hearing under this subsection. The hearing officer may also extend the comment period by so stating at the hearing.

(c) A tape recording or written transcript of the hearing will be made available to the public.

(6) Obligation to raise issues and provide information during the public comment period.

(a) All persons, including applicants, who believe any condition of a draft permit is inappropriate, or that the department's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position, including all supporting material, by the close of the public comment period (including any public hearing) under WAC 173-303-840(3).

(b) All supporting materials will be included in full and may not be incorporated by reference, unless they are already part of the administrative record in the same proceeding, or consist of state or federal statutes and regulations, documents of general applicability, or other generally available reference materials. Commenters must make supporting material not already included in the administrative record available to the department. A comment period longer than forty-five days will often be necessary in complicated proceedings to give commenters a reasonable opportunity to comply with the requirements of this subsection. Commenters may request a longer comment period.

(7) Reopening of the public comment period. If any data, information, or arguments submitted during the public comment period, including information or arguments required under subsection (6) of this section, appear to raise substantial new questions concerning a permit, the department may take one or more of the following actions:

(a) Prepare a new draft permit, appropriately modified;

(b) Prepare a revised statement of basis, a fact sheet or revised fact sheet, and reopen the comment period; or

(c) Reopen or extend the comment period to give interested persons an opportunity to comment on the information or arguments submitted.

Comments filed during the reopened comment period will be limited to the substantial new questions that caused its reopening. The public notice will define the scope of the reopening.

(8) Issuance and effective date of permit.

(a) After the close of the public comment period under WAC 173-303-840(5) on a draft permit, the department will issue a final permit decision (or a decision to deny a permit for the active life of a RCRA dangerous waste facility or unit under WAC 173-303-840). The department will notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. For purposes of this section, a final permit means a final decision to issue, deny, modify, revoke and reissue, or terminate a permit.

(b) A final permit decision will become effective thirty days after the service of notice of the decision, unless:

(i) A later effective date is specified in the decision; or

(ii) No comments requested a change in the draft permit, in which case the permit will become effective immediately upon issuance; or

(iii) Review is requested under chapter 43.21B RCW or an evidentiary hearing is requested under RCW 43.21B.160.

(9) Response to comments. At the time that any final permit is issued, the department will issue a response to comments. This response will specify which provisions, if any, of the draft permit have been changed in the final permit decision and the reason for the change, and briefly describe and respond to all significant comments of the draft permit raised during the public comment period or during any hearing. The response to comments shall be available to the public.

(10) Decision-making procedure for modification, revocation and reissuance, or termination of permits.

(a) Permits may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the department's initiative. However, permits may only be modified or revoked and reissued for the reasons specified in WAC 173-303-830(3), or terminated for the reasons specified in WAC 173-303-805 or 173-303-830(5). All requests must be in writing and must contain facts or reasons supporting the request.

(b) If the department tentatively decides to modify or revoke and reissue a permit under WAC 173-303-830 (3) or (4)(c), it will prepare the draft permit under WAC 173-303-840(2), incorporating the proposed changes. The department may request additional information and, in the case of a modified permit, may require the submission of an updated permit application. In the case of revoked and reissued permits, the department will require the submission of a new application.

(c) In a permit modification under this subsection, only those conditions to be modified will be reopened when a new draft permit is prepared. All other aspects of the existing permit will remain in effect for the duration of the unmodified permit. When a permit is revoked and reissued under this section, the entire permit is reopened just as if the permit had expired and was being reissued. During any revocation and reissuance proceeding the permittee must comply with all conditions of the existing permit until a new final permit is reissued.

(d) "Class 1 and class 2 modifications" as defined in WAC 173-303-830 (4)(a) and (b) are not subject to the requirements of this subsection.

(e) If the department tentatively decides to terminate an interim status permit under WAC 173-303-805 or a final permit under WAC 173-303-806, it will issue a notice of intent to terminate. A notice of intent to terminate is a type of draft permit which follows the same procedures as any draft permit prepared under WAC 173-303-840(2).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW ~~70.105.007. 00~~11-040 (Order 99-01), § 173-303-840, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-840, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-840, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-840, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-14-031 (Order DE 84-22), § 173-303-840, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-840, filed 2/10/82.]

WAC 173-303-845 Appeal of decision. Any person who is adversely affected by a decision of the department under chapter 173-303 WAC may appeal the decision to the pollution control hearings board pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-845, filed 2/10/82.]

WAC 173-303-900 Public involvement and participation. (1) Intent. Public involvement and participation plays a significant role in the decision making process. The department intends to foster public awareness, information and consultation, and to respond actively to public concerns. The department will inform the public of major issues, proposed projects, and regulatory changes, and will consult interested and affected segments of the public before making important decisions. The overall goal of the department is to provide knowledge to the public about dangerous waste issues that vitally affect the state, to encourage broader understanding of the public role in dangerous wastes and their proper management, and to promote an open dialogue between the public, industry, and government.

(2) Applicable requirements. In fulfilling the intent of public involvement and participation in the decision making process, the department will refer to and, where applicable, follow the requirements and guidance set forth in the following:

(a) Chapter 34.04 RCW, Administrative Procedure Act;

(b) Chapter 34.08 RCW, Washington State Register Act of 1977;

(c) Chapter 42.17 RCW, Public Records Act;

(d) Chapter 197-11 WAC, Guidelines interpreting and implementing the State Environmental Policy Act;

(e) 40 CFR Part 25, Public Participation in Programs Under the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Water Act; and

(f) Reserve.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-900, filed 1/12/98, effective 2/12/98; 94-01-060 (Order 92-33), § 173-303-900, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-900, filed 2/10/82.]

WAC 173-303-902 Citizen/proponent negotiations. (1) Intent and purpose. Successful siting of dangerous waste management facilities depends on public confidence, which requires affected communities to have opportunities to meet with owners/operators of proposed dangerous waste management facilities to resolve concerns about such facilities. RCW 70.105.260 authorizes the department to specify a procedure for conflict resolution activities for dangerous waste management facility proponents, host communities, citizens and citizen groups, and to expend funds to support such activities. The purpose of this section is to set forth a procedure for negotiations between affected communities and the proponent of a facility, and the eligibility criteria for financial assistance.

(2) Applicability.

(a) This section applies to local governments and citizens potentially affected by the siting and permitting of a danger-

ous waste management facility, owners and operators of proposed facilities, and owners and operators of facilities for which interim or final status permit applications have been submitted to the department prior to the effective date of this section. This section also applies to existing facilities with interim or final status for which the department receives an application for expansion. This section only applies to the expanded portion of the existing facility.

(b) A modified citizen/proponent negotiations (CPN) process will apply to lead local governments who are also proponents of the facility.

(c) 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, 90.48 RCW, and The Model Toxics Control Act.

(3) Relationship to other legislation and administrative rules.

(a) The lead local government receiving a grant under this section, must comply fully with all applicable federal, state, and local laws, orders, regulations, and permits.

(b) Nothing in this section will influence, affect, or modify department programs, regulations, or enforcement of applicable laws relating to dangerous waste management and disposal.

(c) All grants under this section will be subject to all existing accounting and auditing requirements of state laws and regulations applicable to the issuance of grant funds.

(4) Definitions. As used in this section:

(a) "Citizen/proponent negotiations (CPN)" means a communication process, as specified in these regulations and associated guidelines, between the proponent of a dangerous waste management facility and potentially affected citizens, to reach an agreement when there are shared and opposing interests.

(b) "Designated zone facility" means any facility that requires an interim or final status permit, located in a land use zone designated for handling hazardous substances and hazardous waste, and is not a preempted facility as defined in this section.

(c) "Environmental impact statement (EIS)" means an environmental document prepared according to the State Environmental Policy Act (SEPA), that provides decision makers and the public with an impartial discussion of probable significant environmental impacts, reasonable alternatives, and mitigation measures that would avoid impacts, minimize adverse impacts, or enhance environmental quality.

(d) "Existing facility," as defined by WAC 173-303-281, 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.

(e) "Expansion," as defined by WAC 173-303-281, 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.

(f) "Facilitator" means one who assists at a meeting or group discussion.

(g) "Grant applicant" means the lead local government requesting a citizen/proponent negotiations grant.

(h) "Lead local government" means the city or county in which all or a majority of the proposed dangerous waste management facility would be located, unless the lead local government is a proponent of the project.

(i) "Local negotiating committee" means a committee, appointed by the lead local government, whose membership consists of broad representation from city and county government, citizen groups, academia, business, industry, Indian tribes, and environmental groups potentially affected by the siting of a dangerous waste management facility.

(j) "Mediator" means a neutral person who is accepted voluntarily by opposing parties in a dispute to assist in reaching a settlement.

(k) "Notice of intent," as specified in WAC 173-303-281, means the notice provided by the owner/operator of a facility to the department, local communities, and the public stating that the siting of a dangerous waste management facility, or the expansion of an existing facility, is being considered.

(l) "Neutral convener" means a nonpartisan person hired by the lead local government to convene and preside over the official public meeting.

(m) "Preempted facility" means any facility that includes as a significant part of its activities any of the following operations: (i) Landfill, (ii) incineration, (iii) land treatment, (iv) surface impoundment to be closed as a landfill, or (v) waste pile to be closed as a landfill.

Local jurisdictions who fail to establish designated land use zones for handling hazardous substances and hazardous waste within eighteen months after the enactment of siting criteria in accordance with RCW 70.105.210 will be subject to preemptive provisions until such time as zone designations are completed and approved by the department.

(n) "Potentially affected area" means the area within a twenty-mile radius of a proposed dangerous waste management facility or a proposed expansion to an existing facility or, any area of impact larger or smaller than the twenty-mile radius as determined by the department.

(o) "Proponent" means any person applying to the department for a dangerous waste management facility permit or for the expansion of an existing permit under WAC 173-303-805 or 173-303-806.

(p) "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.

(q) "SEPA" means the State Environmental Policy Act, chapter 43.21C RCW, and SEPA rules, chapter 197-11 WAC.

(5) Citizen/proponent negotiations procedures.

(a) Notice of intent. A proponent for a dangerous waste management facility must apply to the department for a dangerous waste management facility permit or for the expansion of an existing permit. In compliance with WAC 173-303-281, the proponent must submit a notice of intent to the department no less than one hundred fifty days prior to filing an application for a permit or permit revision.

(b) Notice letter.

(i) Within fourteen days of receipt of the notice of intent, the department will send, by registered mail, a copy of the notice of intent, a copy of the CPN regulation, associated guidelines, and a CPN grant application to the elected officials of the lead local government and all local governments within the potentially affected area.

(ii) The notice letter will alert all communities within the potentially affected area that a notice of intent to file was submitted to the department, the availability of a CPN grant, the procedures for applying for a CPN grant, and the procedures for conducting the CPN process.

(iii) Within thirty days of the effective date of this section, the department will send, by registered mail, a notice letter to all local governments potentially affected by facilities for which the department has already received a permit application. The notice letter will contain a copy of the CPN regulation, associated guidelines, and a CPN grant application.

(iv) If the lead local government is also a proponent of the facility, responsibility for CPN will be deferred to a committee comprised of representatives from all incorporated cities and towns, and all the counties in the potentially affected area. This committee must decide, among the government entities represented, who will be the lead local government for the purposes of applying for and administering the CPN grant and selecting members to the negotiating committee as set forth in subsection (6) of this section.

(c) Selection of the neutral convener. Within sixty days of the notice letter, the lead local government and the facility proponent must jointly select a neutral convener, facilitator, or mediator to organize and preside over an official public meeting, assist in selecting the local negotiating committee, and mediate citizen/proponent negotiations.

(d) The public meeting. The purpose of the public meeting will be:

(i) To advise local citizens within the potentially affected area of the CPN procedures, the State Environmental Policy Act (SEPA) requirements, and the dangerous waste management permit process;

(ii) To allow the proponent to present elements of the proposal;

(iii) To take public testimony on whether to agree to participate in the CPN process.

(e) Expenditures by the lead local government for the initial costs of the neutral convener and the official public meeting will be reimbursed by the department through an interagency agreement with the lead local government.

(f) Decision notice. Within forty-five days of the public meeting the lead local government must decide whether to proceed with the negotiations process. The lead local government must forward notice of that decision to the department and the proponent of the facility. Notice to the department of an affirmative decision may include a completed grant application for financial assistance. If the lead local government decides to participate in the negotiations process for preempted facilities, then the proponent will be required to participate. Citizen/proponent negotiations at designated zone facilities will be voluntary for both parties.

(g) Appointment of local negotiating committee. Within thirty days of the decision notice to proceed with CPN, the lead local government and local governments within the potentially affected area must appoint members to a local negotiating committee, as set forth in subsection (6) of this section, and mail notice of those appointments to the department and to the facility proponent.

(h) Organizational meeting. Within twenty-one days of the committee appointments, the committee must hold an organizational meeting to establish the committee goals, set schedules, identify tasks, discuss funding, and identify issues to research.

(i) Negotiations process. The negotiations process may occur in two stages.

(i) Stage 1. Within thirty days of the organizational meeting, the local negotiating committee, with the assistance of the neutral convener, must initiate negotiations and public information and education activities. The local negotiating committee will have one hundred twenty days, or until completion of the SEPA process, to conduct public information and education activities on dangerous waste management and dangerous waste management facilities and to negotiate emerging issues and concerns.

(ii) Stage 2. Upon completion of the SEPA process, with the assistance of the neutral convener, the local negotiating committee may continue formal negotiations. If no environmental impact statement is required as part of the SEPA process, the local negotiating committee may negotiate for up to one hundred twenty days. If an environmental impact statement is required as part of the SEPA process, negotiations may take place until one hundred twenty days after the issuance of the final environmental impact statement. Upon completion of formal negotiations, all agreements should be submitted to the department for review for applicability to the operating permit.

(iii) Negotiations should focus on the mitigation of impacts identified by persons in the affected area and those impacts identified during the SEPA process, which may include but are not limited to:

(A) Technical aspects of the facility proposal;

(B) Emergency response;

(C) Economic impacts;

(D) Management of the facility;

(E) Site characteristics;

(F) Transportation;

(G) Compliance assurance.

(iv) During each stage of the negotiations process, the committee must, at a minimum:

(A) Arrange public forums at key points in the negotiations to solicit input from the local community and provide public education regarding the issues and elements of the proposed facility or facility expansion.

(B) Arrange smaller community gatherings with the whole committee or subgroups of the committee to supplement the larger meetings and to provide more opportunities for discussion with community members.

(C) Meet with key community leaders to solicit information and opinion.

(D) Prepare a draft of the completed local negotiating committee report and agreements. The draft must be submitted for review and comment to the proponent and local county, city, and town officials who made the committee appointments.

(E) Prepare the final local negotiating committee report and agreements. Final copies must be submitted to the department and distributed to the proponent and local county, city, and town officials who made the committee appointments.

(v) Negotiations may be reopened upon agreement by both parties as long as a draft permit has not been issued.

(j) Agreements. Any specific agreement reached between the local negotiating committee and the proponent, deemed valid and applicable by the department, may be incorporated in the operating permit issued by the department. Any agreements not applicable to the operating permit may be implemented by the proponent and local communities through a contract or other legal means.

(6) Local negotiating committee.

(a) Appointments to the local negotiating committee must be made as follows:

(i) Four members must be appointed by the lead local government.

If the lead local government is the county, committee appointments will be made by the county executive in charter counties or the board of county commissioners. If the lead local government is an incorporated town or city, committee appointments will be made by the mayor.

(ii) The mayor of each incorporated city or town in the potentially affected area, that is not a lead local government, must appoint one member to the committee.

(iii) The county executive or the board of county commissioners of each county in the potentially affected area, that is not a lead local government, must appoint one member to the committee.

(iv) Each federally-recognized Indian tribe located in the potentially affected area must appoint one member to the committee.

(v) If all or the majority of a facility is located wholly within city limits, the board of county commissioners or county executive of the potentially affected county must appoint two members to the citizen negotiating committee. If the facility is located wholly within the county, these appointments will not be made.

(b) Local negotiating committees must have broad representation including but not limited to representation from academia, business and industry, citizen organizations, environmental groups, agricultural groups, health professionals, emergency response organizations, and fire districts.

(c) After the initial committee appointments are made, the neutral convener must assess the group representation and determine which interest groups are not represented. The committee, with the aid of the neutral convener, will then select up to four additional members to serve on the local negotiating committee. These selections must be made from interest groups not already represented on the negotiating committee.

(d) Elected officials will not be members of the local negotiating committee.

(7) Modified CPN procedures. Modified CPN procedures apply to lead local governments who are also proponents of a dangerous waste management facility.

(a) Notice letter. Within fourteen days of the notice of intent or thirty days of the effective date of this section, the department will notify all local governments in the potentially affected area of applications for proposed facilities or expansions of existing facilities and of the opportunity for formal negotiations under CPN and the availability of a CPN grant.

(b) Decision notice. The local governments will have forty-five days to form a committee to:

(i) Determine whether they wish to participate in CPN;

(ii) Determine who will be the lead local government;

(iii) Select a neutral convener, facilitator, or mediator;

(iv) Notify the department and the proponent of those decisions; and

(v) Complete a grant application for financial assistance if a decision is made to proceed with CPN.

(c) Once the lead local government is determined, modified CPN procedures must follow CPN procedures set forth in subsections (5)(d) through (6)(d) of this section.

(8) Grant eligibility and eligible activities.

(a) Grant applicant eligibility and eligible activities are the same for CPN and modified CPN.

(b) Grant applicant eligibility. Grants up to fifty thousand dollars will be awarded to the lead local government and may be renewed once during the permitting process.

(c) Eligible costs. Eligible costs include direct costs of the activities of the negotiating process. These costs include:

(i) The local committee's expenses such as travel, office space or lodging, supplies, postage, report production costs, and meeting room costs;

(ii) Neutral convener's, facilitator's, or mediator's fees and expenses;

(iii) Technical assistance for the committee; and

(iv) Other costs determined necessary by the department.

(d) Ineligible costs. Grant funds may not be used by the grant applicant to support legal actions against the department, or facility owners/operators.

(9) Grant administration and funding.

(a) A grant application package will be sent to the lead local government with the notice letter. Grant application packages include grant application deadlines, grant guidelines, and application forms.

(b) Completed grant applications will be reviewed by the department. To receive a grant offer, successful applications must include all required elements as outlined in the guidelines.

(c) The obligation of the department to make grant awards and 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 appropriation of funds during the next biennium.

(d) The department will fund up to fifty percent of the total grant amount or up to fifty thousand dollars for citizen/proponent negotiations and the proponent of a dangerous waste management facility must fund up to fifty percent of the total grant amount or up to fifty thousand dollars.

(e) Disbursement of funds. The department will be responsible for reimbursement of all eligible CPN costs incurred. The proponent must enter into a contract with the department for the proponent's share of the CPN grant. The department will be responsible for all eligible CPN costs incurred before the decision notice and its share of any eligible CPN costs incurred after the decision notice, up to fifty thousand dollars. The proponent will be responsible for its share of all remaining eligible CPN costs incurred after the decision notice and after an executed grant award is made to the lead local government, up to fifty thousand dollars.

(f) The department, on at least a biennial basis, will determine the amount of funding available for citizen/proponent negotiation grants.

(g) All grantees will be held responsible for payment of salaries, consultant's fees, and other overhead costs contracted under a grant awarded to the lead local government.

(h) To the extent that the Constitution and laws of the state of Washington permit, the grantee will 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 grantee arising out of a grant contract, except for such damage, claim, or liability resulting from the negligent act or omission of the department.

(i) All grants under this chapter will be consistent with the provisions of "Financial Guidelines for Grant Management" WDOE 80-6, May 1980, Reprinted March 1982, or subsequent guidelines adopted thereafter.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-902, filed 10/19/95, effective 11/19/95. Statutory Authority: RCW 70.105.260 and 1989 c 2. 89-21-071 (Order 89-25), § 173-303-902, filed 10/17/89, effective 11/17/89.]

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 will 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.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-905, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-905, filed 9/6/88.]

WAC 173-303-910 Petitions. (1) General petitions.

(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 will 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 will 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 34.05.330 or 34.05.240. 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 34.05.330.

(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 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 173-303-100.

(b) To be successful, the generator must make the demonstrations required in WAC 173-303-072(3) and, where applicable, (4).

(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);

(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 will 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 173-303-100 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)(c), 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
> HWTR Program
> Attn Land Disposal Exemption
> PO Box 47600
> Olympia, WA 98504-7600

(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 tenta-

tive decision in writing. The notice will 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 will 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 will 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 will not be subject to the procedures of (f) of this subsection. Temporary exemptions will not be a cause of delaying final decision making on the petition request.

(7) Petitions to amend WAC 173-303-573 to include additional dangerous wastes.

(a) Any person seeking to add a dangerous waste or a category of dangerous waste to the universal waste regulations of WAC 173-303-573 may petition for a regulatory amendment under this section and WAC 173-303-573 (39) and (40).

(b) To be successful, the petitioner must demonstrate to the satisfaction of the department that regulation under the universal waste regulations of WAC 173-303-573: Is appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the dangerous waste program. The petition must include the information required by subsection (1) of this section. The petition should also address as many of the factors listed in WAC 173-303-573(40) as are appropriate for the waste or category of waste addressed in the petition.

(c) The department will grant or deny a petition using the factors listed in WAC 173-303-573(40). The decision will be based on the weight of evidence showing that regulation under WAC 173-303-573 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the dangerous waste program.

(d) The department may request additional information needed to evaluate the merits of the petition.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-910, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-910, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-910, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-910, filed 1/5/88, effective 2/5/88; 86-12-057 (Order DE-85-10), § 173-303-910, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-910, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-910, filed 2/10/82.]

WAC 173-303-950 Violations and enforcement. Any violation of this chapter may be subject to the enforcement and penalty sanctions of chapter 70.105 RCW. Such violations include, but are not limited to:

(1) Offering or transporting dangerous waste to a facility which does not have a permit;

(2) Transferring, treating, storing, or disposing of dangerous waste without a permit; or

(3) Falsely representing information in any application, label, manifest, record, report, permit, petition, or other document filed, maintained or used for the purpose of compliance with this chapter.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-950, filed 4/18/84.]

WAC 173-303-960 Special powers and authorities of the department. (1) Applicability. This section applies to departmental powers and authorities when taking actions against activities that may present an imminent and substantial endangerment to health or the environment.

(2) Notwithstanding any other provision of this chapter, upon receipt of evidence or with due cause the department believes that the handling, storage, treatment, transportation, recycling, or disposal of any dangerous waste or solid waste may present an imminent and substantial endangerment to health or the environment, the department may:

(a) Authorize an agency inspector to enter at reasonable times establishments regulated under this chapter for the purposes of inspection, monitoring, and sampling; and

(b) Direct the attorney general to bring suit on behalf of the state to immediately restrain any person contributing to

such handling, storage, treatment, transportation, recycling, or disposal to immediately stop such handling, storage, treatment, transportation, recycling, or disposal or to take such other action as may be necessary.

[Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-960, filed 6/3/86.]

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 173-303-9902 Narrative for designating dangerous wastes. (Reserved.)

[Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-9902, filed 6/3/86. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-9902, filed 2/10/82.]

WAC 173-303-9903 Discarded chemical products list.

Discarded Chemical Products List

"P" Chemical Products

Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound is only listed for acute toxicity.

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicard sulfone
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-,potassium
P010	7778-39-4	Arsenic acid H_3AsO_4
P012	1327-53-3	Arsenic oxide As_2O_3
P011	1303-28-2	Arsenic oxide As_2O_5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)
P001	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P189	55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl- 1H-pyrazol-3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P022	75-15-0	Carbon disulfide
P189	55285-14-8	Carbosulfan
P095	75-44-5	Carbonic dichloride
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P191	644-64-4	Dimetilan
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha, 8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta, 8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta, 6beta,6aalpha,7beta, 7aalpha)-

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P051	[1]72-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha, 6alpha,6abeta,7beta, 7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	[1]534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)-carbonyl]oxime
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride
P197	17702-57-7	Formparanate
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-
P196	15339-36-3	Manganese dimethyldithiocarbamate
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy] phenyl]-
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P199	2032-65-7	Methiocarb
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb
P128	315-18-4	Mexacarbate
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide $Ni(CN)_2$
P075	[1]54-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO_2
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194	23135-22-0	Oxamyl
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P048	51-28-5	Phenol, 2,4-dinitro-
P047	[1]534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P204	57-47-6	Physostigmine
P188	57-64-7	Physostigmine salicylate
P110	78-00-2	Plumbane, tetraethyl-

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	[1]54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-,methylcarbamate (ester), (3aS-cis)-
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	[1]57-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	[1]57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl_2O_3
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P185	26419-73-8	Tirpate
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V_2O_5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	[1]81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram

FOOTNOTE: [1] CAS Number given for parent compound only.

"U" Chemical Products

Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U394	30558-43-1	A2213
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	[1]94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balpha)]-
U280	101-27-9	Barban
U278	22781-23-3	Bendiocarb
U364	22961-82-6	Bendiocarb phenol
U271	17804-35-2	Benomyl
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid,bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester

U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl- (I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	[1]81-07-2	1,2-Benzisothiazol-3(2H)-one,1,1-dioxide, & salts
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	189-55-9	Benzo[rst]pentaphene
U248	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	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-ylester, [1S-[1alpha(Z),7(2S*,3R*), 7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-,ethyl ester
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	[1]111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U279	63-25-2	Carbaryl
U372	10605-21-7	Carbendazim
U367	1563-38-8	Carbofuran phenol
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gammaisomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine,hydrochloride
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha, 6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	[1]94-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether

U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U395	5952-26-1	Diethylene glycol, dicarbamate
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U404	121-44-8	Ethanamine, N,N-diethyl-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thiobis[(methylimino) carbonyloxy]]bis-, dimethyl ester
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino) -N-hydroxy-2-oxo-, methyl ester
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	[1]111-54-6	Ethylenebisdithiocarbamic acid,salts & esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H_2S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I, T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene

U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one,1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 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-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid,3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U279	63-25-2	1-Naphthalenol, methylcarbamate
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl) bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-,phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-,methyl ester (I,T)
U373	122-42-9	Propham
U411	114-26-1	Propoxur
U387	52888-80-9	Prosulfocarb
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	[1]81-07-2	Saccharin, & salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS_2 (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)

U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl-
U409	23564-05-8	Thiophanate-methyl
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U389	2303-17-5	Triallate
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl)phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
eU248	[1]81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations of 10%or less

FOOTNOTE: [1]CAS Number given for parent compound only.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-9903, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-9903, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9903, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9903, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-9903, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-9903, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-9903, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-9903, filed 2/10/82.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-303-9904 Dangerous waste sources list.

The following Hazard Codes are used to indicate the basis EPA used for listing the classes or types of wastes listed in this section:

Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
Toxicity Characteristic Waste	(E)
Acute Hazardous Waste	(H)
Toxic Waste	(T)

DANGEROUS WASTE SOURCES LIST

Dangerous Waste No.	Sources
	Nonspecific Sources
Generic:	
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)
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, trichlorofluoromethane and 1,1,2 trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)
F003	The following spent nonhalogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above nonhalogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I)
F004	The following spent nonhalogenated solvents: Cresols and cresylic acid, nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)

Dangerous Waste No.	Sources
F005	The following spent nonhalogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I,T)
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. (T)
F007	Spent cyanide plating bath solutions from electroplating operations. (R,T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. (R,T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. (R,T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. (R,T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. (R,T)
F012	Quenching wastewater treatment sludges from metal heat-treating operations where cyanides are used in the process. (T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. (T)
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 produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.) (See footnote 1, below.) (H)
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 1, below.) (H)
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 1, below.) (H)
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 1, 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.) (H)
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in this section.) (T)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (T)
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 1, below.) (H)

Dangerous Waste No.	Sources
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (See footnote 1, below.) (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.) (H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with nonspecific sources wastes F020, F021, F022, F023, F026 and F027. (T)
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with WAC 173-303-083 or potentially cross-contaminated wastes that are otherwise currently regulated as dangerous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
F037	Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: Oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in footnote 2, below (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under WAC 173-303-071 (3)(cc)(i), if those residuals are to be disposed of. (See footnote 2, below.) (T)
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: Induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in footnote 2, below (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing. (See footnote 2, below.) (T)

Dangerous Waste No.	Sources
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as dangerous under WAC 173-303-9903, 173-303-9904, and 173-303-9905. (Leachate resulting from the disposal of one or more of the following dangerous wastes, and no other dangerous wastes, retains its Dangerous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.) (T)
	Specific Sources
Wood Preservation:	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol. (T)
Inorganic Pigments:	
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments. (T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments. (T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments. (T)
K005	Wastewater treatment sludge from the production of chrome green pigments. (T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated). (T)
K007	Wastewater treatment sludge from the production of iron blue pigments. (T)
K008	Oven residue from the production of chrome oxide green pigments. (T)
Organic Chemicals:	
K009	Distillation bottoms from the production of acetaldehyde from ethylene. (T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene. (T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile. (R,T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile. (R,T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile. (T)
K015	Still bottoms from the distillation of benzyl chloride. (T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride. (T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin. (T)
K018	Heavy ends from the fractionation column in ethyl chloride production. (T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production. (T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production. (T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production. (T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene. (T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene. (T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene. (T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene. (T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene. (T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene. (T)
K026	Stripping still tails from the production of methyl ethyl pyridines. (T)
K027	Centrifuge and distillation residues from toluene diisocyanate production. (R,T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane. (T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane. (T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane. (T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane. (T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene. (T)
K083	Distillation bottoms from aniline production. (T)
K103	Process residues from aniline extraction from the production of aniline. (T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production. (T)
K085	Distillation of fractionation column bottoms from the production of chlorobenzenes. (T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes. (T)
K107	Column bottoms from product separation from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazines. (C,T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from the carboxylic acid hydrazides. (I,T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. (T)

Dangerous Waste No.	Sources
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. (T)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene. (C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine. (T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene. (T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. (T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. (T)
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.) (T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha-(or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha-(or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K159	Organics from the treatment of thiocarbamate wastes. (T)
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (R,T)
Explosives:	
K044	Wastewater treatment sludges from the manufacturing and processing of explosives. (R)
K045	Spent carbon from the treatment of wastewater containing explosives. (R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds. (T)
K047	Pink/red water from TNT operations. (R)
Inorganic Chemicals:	
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used. (T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production. (T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production. (T)
Petroleum Refining:	
K048	Dissolved air flotation (DAF) float from the petroleum refining industry. (T)
K049	Slop oil emulsion solids from the petroleum refining industry. (T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry. (T)
K051	API separator sludge from the petroleum refining industry. (T)
K052	Tank bottoms (leaded) from the petroleum refining industry. (T)
K169	Crude oil storage tank sediment from petroleum refining operations. (T)

Dangerous Waste No.	Sources
K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations. (T)
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I,T)
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I,T)
Iron and Steel:	
K061	Emission control dust/sludge from the primary production of steel in electric furnaces. (T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332). (C,T)
Pesticides:	
K031	Byproduct salts generated in the production of MSMA and cacodylic acid. (T)
K032	Wastewater treatment sludge from the production of chlordane. (T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T)
K035	Wastewater treatment sludges generated in the production of creosote. (T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton. (T)
K037	Wastewater treatment sludges from the production of disulfoton. (T)
K038	Wastewater from the washing and stripping of phorate production. (T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (T)
K040	Wastewater treatment sludge from the production of phorate. (T)
K041	Wastewater treatment sludge from the production of toxaphene. (T)
K098	Untreated process wastewater from the production of toxaphene. (T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T. (T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D. (T)
K099	Untreated wastewater from the production of 2,4-D. (T)
K123	Process wastewater (including supernates, filtrates, and wastewaters) from the production of ethylenebisdithiocarbamic acid and its salts. (T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. (C,T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts. (T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts. (T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide. (C,T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide. (T)
Primary Copper:	
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production. (T)
Primary Lead:	
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities. (T)
Primary Zinc:	
K066	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production. (T)
Primary Aluminum:	
K088	Spent potliners from primary aluminum reduction. (T)
Ferroalloys:	
K090	Emission control dust or sludge from ferrochromium-silicon production. (T)
K091	Emission control dust or sludge from ferrochromium production. (T)
Secondary Lead:	
K069	Emission control dust/sludge from secondary lead smelting. (T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)
Veterinary Pharmaceuticals:	
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)

Dangerous Waste No.	Sources
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
Ink Formulation:	
K086	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. (T)
Coking:	
K060	Ammonia still-lime sludge from coking operations. (T)
K087	Decanter tank tar sludge from coking operations. (T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recover of coke by-products produced from coal.
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.
K147	Tar storage tank residues from coal tar refining.
K148	Residues from coal tar distillation, including but not limited to, still bottoms.

Footnotes

1 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.

2 Listing Specific Definitions:

a For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids.

b(i) For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: Activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and (A) the units employs a minimum of 6 hp per million gallons of treatment volume; and either (B) the hydraulic retention time of the unit is no longer than 5 days; or (C) the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a dangerous waste by the Toxicity Characteristic.

(ii) Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities must maintain, in their operating or other on-site records, documents and data sufficient to prove that: (A) The unit is an aggressive biological treatment unit as defined in this subsection; and (B) the sludges sought to be exempted from the definitions of F037 and/or F038 were actually treated in the aggressive biological treatment unit.

c(i) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

(ii) For the purposes of the F038 listing,

(A) Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement and

(B) Floats are considered to be generated at the moment they are formed in the top of the unit.

State Sources

W001 Discarded transformers, capacitors or bushings containing polychlorinated biphenyls (PCB) at concentrations of 2 parts per million or greater (except when drained of all free flowing liquid) and the following wastes generated from the salvaging, rebuilding, or discarding of transformers, capacitors or bushings containing polychlorinated biphenyls (PCB) at concentrations of 2 parts per million or greater: Cooling and insulating fluids and cores, including core papers. (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 their PCB waste is excluded from the requirements of chapter 173-303 WAC.)

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-9904, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-9904, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-9904, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9904, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9904, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-9904, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-9904, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-9904, filed 6/3/86; 85-09-042 (Order DE-85-02), § 173-303-9904, filed 4/15/85; 84-09-088 (Order DE 83-36), § 173-303-9904, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9904, filed 2/10/82.]

WAC 173-303-9905 Dangerous waste constituents list.

A2213 (Ethanimidothioic acid, 2- (dimethylamino) -N-hydroxy-2-oxo-, methyl ester)
Acetic Acid,2,4,5-trichlorophenoxy-, salts and esters (2,4,5-T, salts and esters)
Acetonitrile [Ethanenitrile]
Acetophenone (Ethanone, 1-phenyl)
-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts (Warfarin)
2-Acetylaminofluorene (Acetemide,N-9H- fluoren-2-yl)-)
Acetyl chloride (Ethanoyl chloride)
1-Acetyl-2-thiourea (Acetamide,N-(aminothioxo-methyl)-)
Acrolein (2-Propenal)
Acrylamide (2-Propenamide)
Acrylonitrile (2-Propenenitrile)
Aflatoxins
Aldicarb sulfone (Propanal, 2-methyl-2-(methylsulfonyl) -, O-[(methylamino) carbonyl] oxime)
Aldrin (1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a,-hexahydro-endo,exo- 1,4:5,8-Dimethanonaphthalene)
Allyl alcohol (2-Propen-1-ol)
Allyl chloride (1-Propane, 3-chloro)
Aluminum phosphide
4-Aminobiphenyl ([1,1'-Biphenyl]-4-amine)
6-Amino-1,1a,2,8,8a,8b-hexahydro-8- (hydroxymethyl) -8a-methoxy-5-methyl- carbamate azirino[2', 3':3,4]pyrrolo[1,2-a]indole-4,7-dione, (ester) (Mitomycin C) (Azirino[2'3':3,4]pyrrolo(1,2-a)indole-4, 7-dione, 6-amino-8[
4-Aminopyridine(4-Pyridinamine)
Amitrole (1H-1,2,4-Triazol-3-amine)
Aniline (Benzenamine)
Antimony and compounds, N.O.S.*
Aramite (Sulfurous acid 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester)Arsenic and compounds, N.O.S.*
Barban (Carbamic acid, (3-chlorophenyl) -, 4-chloro-2-butynyl ester)
Barium and compounds, N.O.S.*
Barium cyanide
Bendiocarb (1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate)
Bendiocarb phenol (1,3-Benzodioxol-4-ol, 2,2-dimethyl-,)
Benomyl (Carbamic acid, [1- [(butylamino) carbonyl]-1H-benzimidazol-2-yl] -, methyl ester)
Benz[c]acridine (3,4-Benzacridine)
Benz[a]anthracene (1,2-Benzanthracene)
Benzene (Cyclohexatriene)
Benzenearsonic acid (Arsonic acid, phenyl-)
Benzene, 2-amino-1-methyl (o-Toluidine)
Benzene, 4-amino-1-methyl (p-Toluidine)
Benzene, dichloromethyl- (Benzal chloride)
Benzenethoil (Thiophenol)
Benzidine ([1,1'-Biphenyl]-4,4'diamine)
Benzo[b]fluoranthene (2,3-Benzofluoranthene)
Benzo(k)fluoranthene
Benzo[j]fluoranthene (7,8-Benzofluoranthene)
Benzo[a]pyrene (3,4-Benzopyrene)
p Benzoquinone (1,4-Cyclohexadienedione)
Benzotrichloride (Benzene, trichloromethyl-)
Benzyl chloride (Benzene, (chloromethyl)-)
Beryllium powder
Beryllium compounds, N.O.S.*
Bis(2-chloroethoxy)methane (Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-])
Bis(2-chloroethyl) ether (Ethane, 1,1'-oxybis[2-chloro-])
N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine)
Bis(2-chloroisopropyl) ether (Propane, 2,2'-oxybis[2-chloro-])
Bis(chloromethyl) ether (Methane, oxybis[chloro-])
Bis(2-ethylhexyl) phthalate (1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester)
Bis(pentamethylene)-thiuram tetrasulfide (Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-)
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)-)
Butylate (Carbamothioic acid, bis(2 methylpropyl)-, S-ethyl ester)
Cadmium and compounds, N.O.S.*
Calcium chromate (Chromic acid, calcium salt)
Calcium cyanide
Carbamic Acid, ethyl ester
Carbaryl (1-Naphthalenol methylcarbamate)
Carbendazim (Carbamic acid, 1H-benzimidazol-2-yl, methyl ester)
Carbofuran (7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate)
Carbofuran phenol (7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-)
Carbon disulfide (Carbon bisulfide)
Carbon oxyfluoride (Carbonyl fluoride)
Carbosulfan (Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester)

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-chloroethoxy)-)
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 tar creosote
Copper cyanide
Copper dimethyldithiocarbamate (Copper, bis(dimethylcarbamodithioato-S,S')-,)
Creosote
Cresols (Cresylic acid) (Phenol, methyl-)
Crotonaldehyde (2-Butenal)
m-Cumenyl methylcarbamate (Phenol, 3-(methylethyl)-, methyl carbamate)
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-)
Cycloate (Carbamothioic acid, cyclohexylethyl-, S-ethyl ester)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-cyclohexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2,-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-)
Dazomet (2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl-)
DDD (Dichlorodiphenyldichloroethane) (Ethane, 1,1-dichloro-2,2-bis(p chlorophenyl)-)
DDE (Ethylene, 1,1-dichloro-2,2-bis(4-chlorophenyl)-)
DDT (Dichlorodiphenyltrichloroethane) (Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-)
Diallate (S-(2,3-dichloroallyl) diisopropylthiocarbamate)
Dibenz[a,h]acridine (1,2,5,6-Dibenzacridine)
Dibenz[a,j]acridine (1,2,7,8-Dibenzacridine)
Dibenz[a,h]anthracene (1,2,5,6-Dibenzanthracene)
7H-Dibenzo[c,g]carbazole (3,4,5,6-Dibenzcarbazole)
Dibenzo[a,e]pyrene (1,2,4,5-Dibenzpyrene)
Dibenzo[a,h]pyrene (1,2,5,6-Dibenzpyrene)
Dibenzo[a,i]pyrene (1,2,7,8-Dibenzpyrene)
1,2-Dibromo-3-chloropropane (Propane, 1,2-dibromo-3-chloro-)
1,2-Dibromoethane (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-)
Dichlorodifluoromethane (Methane, dichlorodifluoro-)
1,1-Dichloroethane (Ethylidene dichloride)
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)
Dichloropropane, N.O.S.* (Propane, dichloro-, N.O.S.*)
1,2-Dichloropropane (Propylene dichloride)
Dichloropropanol, N.O.S.* (Propanol, dichloro-, N.O.S.*)
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)
1,2:3,4-Diepoxybutane (2,2'-Bioxirane)
Diethylarsine (Arsine, diethyl-)
N,N'-Diethylhydrazine (Hydrazine, 1,2-diethyl)
O,O-Diethyl S-methyl ester of phosphorodithioic acid (Phosphorodithioic acid, O,O-diethyl S-methyl ester

O,O-Diethylphosphoric acid, O-p-nitrophenyl ester (Phosphoric acid, diethyl p-nitrophenyl ester)
Diethyl phthalate (1,2-Benzenedicarboxylic acid, diethyl ester)
O,O-Diethyl O-2-pyraxinyl phosphorothioate (Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
Diethylene glycol, dicarbamate (Ethanol, 2,2'-oxybis-, dicarbamate)
Diethylstilbesterol (4,4'-Stilbenediol, alpha,alpha-diethyl, bis(dihydrogen phosphate, (E)-)
Dihydrosafrole (Benzene, 1,2-methylenedioxy-4-propyl-)
3,4-Dihydroxy-alpha-(methylamino)methyl benzyl alcohol (1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-)
Diisopropylfluorophosphate (DFP) (Phosphorofluoridic acid, bis(1-methylethyl) ester)
Dimethoate (Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
3,3'-Dimethoxybenzidine ([1,1'-Biphenyl]-4,4'diamine, 3-3'dimethoxy-)
p-Dimethylaminoazobenzene (Benzenamine, N,N-dimethyl-4-(phenylazo)-)
7,12-Dimethylbenz[a]anthracene (1,2-Benzanthracene, 7,12-dimethyl-)
3,3'Dimethylbenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-)
Dimethylcarbamoyl chloride (Carbamoyl chloride, dimethyl-)
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 (Thiofanox)
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)
Dimetilan (Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl 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-)
2,4-Dinitrotoluene (Benezene, 1-methyl-2,4-dinitro-)
2,6-Dinitrotoluene (Benzene,1-methyl-2,6-dinitro-)
Dinoseb (Phenol, 2-(1-methylpropyl)-4,6-dinitro-)
Di-n-octyl phthalate (1,2-Benzenedicarbozylic 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)
Disulfiram (Thioperoxydicarbonic diamide, tetraethyl)
Disulfoton (O,O-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate)
Dithiobiuret (Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$)
EPTC (Carbamothioic acid, dipropyl-, S-ethyl ester)
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,endo-1,4:5,8-dimethanonaphthalene, and metabolites)
Ethyl carbamate (Urethan) (Carbamic acid, ethyl ester)
Ethyl cyanide (propanenitrile)
Ethyl ziram (Zinc, bis(diethylcarbamodithioato- S,S')-)
Ethylenebisdithiocarbamic acid, salts and esters (1,2-Ethanediylbiscarbamodithioic acid, salts and esters.
Ethylene glycol monoethyl ether (2-Ethoxyethanol)
Ethyleneimine (Aziridine)
Ethylene oxide (Oxirane)
Ethylenethiourea (2-Imidazolidinethione)
Ethylmethacrylate (2-Propenoic acid, 2-methyl-, ethyl ester)
Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester)
Ferbam (Iron, tris(dimethylcarbamodithioato- S,S')-)
Fluoranthene (Benzo[j,k]fluorene)
Fluorine
2-Fluoroacetamide (Acetamide, 2-fluoro-)
Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)
Formaldehyde (Methylene, oxide)
Formetanate hydrochloride (Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino) carbonyl]oxy]phenyl]-, monohydrochloride)
Formic acid (Methanoic acid)
Formparanate (Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino) carbonyl]oxy]phenyl]-)
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)
Heptachlorodibenzofurans
Heptachlorodibenzo-p-dioxins
Hexachlorobenzene (Benzene, hexachloro-)
Hexachlorobutadiene (1,3-Butadiene, hexachloro-)
Hexachlorocyclohexane (all isomers) (Lindane and isomers)
Hexachlorocylopentadiene (1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-)
Hexachlorodibenzo-p-dioxins
Hexachlorodibenzofurans
Hexachloroethane (Ethane, hexachloro-)
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,endo-dimethanonphthalene (Hexachlorohexahydro-endo,endo-dimethanonaphthalene)
Hexachlorophene (2,2'-Methylenebis(3,4,6-trichlorophenol))
Hexachloropropene (Propene, 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)
3-Iodo-2-propynyl n-butylcarbamate (Carbamic acid, butyl-, 3-iodo-2- propynyl ester)
Iodomethane (Methyl iodide)
Isocyanic acid, methyl ester (Methyl isocyanate)Isobutyl alcohol (1-Propanol, 2-methyl-)
Isolan (Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester)
Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Kepone (Decachlorooctahydro-1,3,4-Methano-2H-cyclobuta[cd]pentalene-2-one)
Lasiocarpine (2-Butanoic 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)tetrahydroxytri-)
Maleic anhydride (2,5-Furandione)
Maleic hydrazide (1,2-Dihydro-3,6-pyridazinedione)
Malononitrile (Propanedinitrile)
Manganese dimethyldithiocarbamate (Manganese, bis(dimethylcarbamodithioato-S,S')-,)
Melphalan (Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-,L-)
Mercury Fulminate (Fulminic acid, mercury salt)
Mercury and compounds, N.O.S.*
Metam sodium (Carbamodithioic acid, methyl-, monosodium salt)
Methacrylonitrile (2-Propenenitrile, 2-methyl-)
Methanethiol (Thiomethanol)
Methapyrilene (Pyridine, 2-[(2-dimethylamino)ethyl]-2-thenylamino-)
Methiocarb (Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate)
Metholonyl (Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-,methyl ester
Methoxychior (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'-methylenebis-(2-chloro-)
Methyl ethyl ketone (MEK) (2-Butanone)
Methyl hydrazine (Hydrazine, methyl-)
2-Methyllactonitrile (Propanenitrile, 2-hydroxy-2-methyl-)
Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)
Methyl methanesulfonate (Methanesulfonic acid, methyl ester)
2-Methyl-2-(methylthio)propionaldehyde-o-(methylcarbonyl) oxime
N-Methyl-N'-nitro-N-nitrosoguanidine (Guanidine, N-nitros-N-methyl-N'nitro-)
Methyl parathion (O,O-dimethyl O-(4-nitrophenyl) phosphorothioate)
Methylthiouracil (4-1H-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-)
Metolcarb (Carbamic acid, methyl-, 3-methylphenyl ester)
Mexacarbate (Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester))
Molinate (1H-Azepine-1-carbothioic acid,hexahydro-, S-ethyl ester)
Mustard gas (Sulfide, bis(2-chloroethyl)-)
Naphthalene
1,4-Naphthoquinone (1,4-Naphthalenedione)
1-Naphthylamine (alpha-Naphthylamine)
2-Naphthylamine (beta-Naphthylamine)
1-Naphthyl-2-thiourea (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)
p-Nitroaniline (Benzenamine, 4-nitro-)
Nitrobenzine (Benzene, nitro-) Nitrobenzene
Nitrogen dioxide (Nitrogen (IV) oxide)
Nitrogen mustard and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-
N-methyl-, and hydrochloride salt)
Nitrogen mustard N-Oxide and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, N-oxide, and hydro-chloride salt)
Nitroglycerine (1,2,3-Propanetriol, trinitrate)
4-Nitrophenol (Phenol, 4-nitro-)
2-Nitropropane (Propane 2-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-Nitrosodiethanolamine (Ethanol, 2,2'-(nitrosoimino)bis-)
N-Nitrosodiethylamine (Ethanamine, N-Ethyl-N-nitroso-)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitroso-N-ethylurea (Carbamide, N-ethyl-N-nitroso-)
N-Nitrosomethylethylamine (Ethanamine, N-methyl-N-nitroso-)
N-Nitroso-N-methylurea (Carbamide, N-methyl-N-nitroso-)
N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl ester)
N-Nitrosomethylvinylamine (Ethenamine, N-methyl-N-nitroso-)
N-Nitrosomorpholine (Morpholine, N-nitroso-)
N-Nitrosonornicotine (Nornicotine, N-nitroso-)
N-Nitrosopiperidine (Pyridine, hexahydro-, N-nitroso-)
N-Nitrosopyrrolidine (pyrrole, tetrahydro-, N-nitroso-)

N-Nitrososacrosine (Sarcosine, N-nitroso-)
5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)
Octamethylpyrophosphoramide (Diphosphoraminde, octamethyl-)
Osmium tetroxide (Osmium (VIII) oxide)
7-Ocabicyclo[2.2.1]heptane-2,3-dicarbonxylic acid (Endothal)
Oxamyl (Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester)
Paraldehyde (1,3,5-Trioxane, 2,4,6-trinethyl-)
Parathion (Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester
Pebulate (Carbamothioic acid, butylethyl-, S- propyl ester)
Pentachlorobenzene (Benzene, pentachloro-)
Pentachlorodibenzo-p-dioxins
Pentachlorodibenzofurans
Pentachloroethane (Ethane, pentachloro-)
Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-)
Pentachlorophenol (Phenol, pentachloro-)
Perchloromethyl mercaptan (Methanesulferryl chloride, trichloro-)
Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)
Phenol (Benzene, hydroxy-)
Phenylenediamine (Benzenediamine)
Phenylmercury acetate (Mercury, acetatophenyl-)
N-Phenylthiourea (Thiourea, phenyl-)
Phosgene (Carbonyl chloride)
Phosphine (Hydrogen phosphide)
Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] 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)
Physostigmine (Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-,methylcarbamate (ester), (3aS-cis)-)
Physostigmine salicylate (Benzoic acid, 2-hydroxy-, compd. with (3aS-cis) --1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1).)
2-Picoline (Pyridine, 2-methyl-)
Polychlorinated biphenyl, N.O.S.*
Potassium cyanide
Potassium dimethyldithiocarbamate (Carbamodithioic acid, dimethyl, potassium salt)
Potassium n-hydroxymethyl-n-methyl- dithiocarbamate (Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt)
Potassium n-methyldithiocarbamate (Carbamodithioic acid, methyl- monopotassium salt)
Potassium pentachlorophenate (Pentachlorophenol, potassium salt)
Potassium silver cyanide (Argentate(1-), dicyano-, potassium)
Promecarb (Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate)
Pronamide (3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide)
1,3-Propanesultone (1,2-Oxathiolane, 2,2-dioxide)
Propham (Carbamic acid, phenyl-, 1-methylethyl ester)
Propionic acid, 2-(2,4,5-trichlorophenoxy), salts and esters (2,4,5-TP,Silvex, salts and esters)
Propoxur (Phenol, 2-(1-methylethoxy)-, methylcarbamate)
n-Propylamine (1-Propane)
Propylthiouracil (2,3 dihydro-6-propyl-2 thioxo-4(1H)-pyrimidinone)
2-Propyn-1-ol (Propargyl alcohol)
Prosulfocarb (Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester)
Pyridine
Reserpine (Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenxoyl)oxy]-, methyl ester)
Resorcinol (1,3-Benzenediol)
Saccharin and salts (1,2-Benzoisothiazolin-3-one, 1,1-dioxide, and salts)
Safrol (Benzene, 1,2-methylenedioxy-4-allyl-)
Selenious acid (Selenium dioxide)
Selenium and compounds, N.O.S.*
Selenium sulfide (Sulfur selenide)
Selenium, tetrakis (dimethyl-dithiocarbamate) (Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid)
Selenourea (Carbamimidoselenoic acid)
Silver and compounds, N.O.S.*
Silver cyanide
Sodium cyanide
Sodium dibutyldithiocarbamate (Carbamodithioic acid, dibutyl, sodium salt)
Sodium diethyldithiocarbamate (Carbamodithioic acid, diethyl-, sodium salt)
Sodium dimethyldithiocarbamate (Carbamodithioic acid, dimethyl-, sodium salt)
Sodium pentachlorophenate (Pentachlorophenol, sodium salt)
Streptozotocin (D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-)
Strychnine and salts (Strychnidin-10-one, and salts)
Sulfallate (Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester)
Tetrabutylthiuram disulfide (Thioperoxydicarbonic diamide, tetrabutyl)
1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro-)
Tetrachlorodibenzo-p-dioxins
Tetrachlorodibenzofurans
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-Tetrachlorethane (Ethane, 1,1,1,2-tetrachloro-)
1,1,2,2-Tetrachlorethane (Ethane, 1,1,2,2-tetrachloro-)
Tetrachlorethylene (Ethene, 1,1,2,2-tetrachloro-)[1]

Tetrachloromethane (Carbon tetrachloride)
2,3,4,6-Tetrachlorophenol (Phenol,2,3,4,6-tetrachloro-)
2,3,4,6-Tetrachlorophenol, potassium salt
2,3,4,6-Tetrachlorophenol, sodium salt
Tetraethyldithiopyrophosphate (Dithiopyrophosphoric acid, tetraethyl-ester)
Tetraethyl lead (Plumbane, tetraethyl-)
Tetraethylpyrophosphate (Pyrophosphoric acid, tetraethyl ester)
Tetramethylthiuram monosulfide (Bis(dimethylthiocarbamoyl) sulfide)Tetranitromethane (Methane, tetranitro-)
Thallium and compounds, N.O.S.*
Thallic oxide (Thallium (III) oxide)
Thallium (1) 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)
Thiodicarb (Ethanimidothioic acid, N,N'-[thiobis [(methylimino) carbonyloxy]] bis-, dimethyl ester.)
Thiophanate-methyl (Carbamic acid, [1,2-phyenylenebis (iminocarbonothioyl)] bis-, dimethyl ester)
Thiosemicarbazide (Hydrazinecarbothioamide)
Thiourea (Carbamide thio-)
Thiuram (Bis(dimethylthioucarbamoyl) disulfide)
Tirpate (1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime.)
Toluene (Benzene, methyl-)
Toluenediamine, N.O.S. (Toluene, 2,5-diamine-)
2,4-Toluenediamine
2,6-Toluenediamine
3,4-Toluenediamine
o-Toluidine hydrochloride (Benzenamine, 2-methyl-, hydrochloride)
Tolylene diisocyanate (Benzene, 2,4- and 2,6-diisocyanato-methyl-)
Toxaphene (Camphene, octachloro-)
Triallate (Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester)
Tribromomethane (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)
Trichloromonofluoromethane (Methane, trichlorofluoro-)
2,4,5-Trichlorophenol (Phenol, 2,4,5-trichloro-)
2,4,6-Trichlorophenol (Phenol, 2,4,6-trichloro-)
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T, salts and esters) (Acetic acid, 2,4,5-trichlorophenoxy-, salts and esters)
2,4,5-Trichlorophenoxypropionic acid (Porpionoic acid, 2-(2,4,5-trichlorophenoxyl), salts and esters (2,4,5-TP, Silvex, salts and esters))
Trichloropropane, N.O.S.* (Propane, trichloro-, N.O.S.*
1,2,3-Trichloropropane (Propane, 1,2,3-trichloro-)
O,O,O-Triethyl phosphorothioate (Phosphorothioic acid, O,O,O-triethyl ester)
Triethylamine (Ethanamine, N,N-diethyl-)
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)
Undecamethylenediamine, N,N'-bis-(2-chloro-benzyl)-,dihydrochloride N,N'-Undecamethyl-enebis(2-chlorobenzylamine, dihydrochloride)
Uracil mustard (Uracil 5-[bis(2-chlorethyl)amino]-)
Vanadic acid, ammonium salt (ammonium vanadate)
Vanadium pentoxide (Vanadium (V) oxide)
Vernolate (Carbamothioic acid, dipropyl-,S-propyl ester)
Vinyl chloride (Ethane, chloro-)
Warfarin (2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3%)
Warfarin (2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3%)
Warfarin salts, when present at concentrations less than 0.3%
Warfarin salts, when present at concentrations greater than 0.3%
Zinc cyanide
Zinc phosphide
Ziram (Zinc, bis(dimethylcarbamodithioato-S,S')-, (T-4)-)

* The abbreviation N.O.S. signifies those members of the general class "not otherwise specified" by name in this listing.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-9905, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-9905, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9905, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-9905, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-9905, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-9905, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-9905, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9905, filed 2/10/82.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-303-9906 Special waste bill of lading.

SPECIAL WASTE
BILL OF LADING
EXAMPLE

1) Receiving Facility Name: _____ phone: _____
   Address: _____ fax: _____
2) Customer Name: _____ phone: _____
   Address: _____ fax: _____
3) Property Owner Name
   (where waste originated): _____ phone: _____
   Address: _____ fax: _____
4) Hauler Name: _____ phone: _____
   Address: _____ fax: _____
5) Consultant Name: _____ phone: _____
   Address: _____ fax: _____
6) Amount of waste: _____
7) Original Location of Special Waste: _____
8) Activity Which Generated Waste: _____
9) Description of Waste. Include any Applicable Dangerous Waste Code: _____

_____

10) Does Waste Have Potential to Create Fugitive Dust? Yes_____ No_____
    If Yes, What is your Plan to Mitigate Dust?

_____

_____

11) Amount of wastes in pounds or tons: _____

SPECIAL WASTE WASTE ANALYSIS

Customer Must Initial the Appropriate Item.

_____1. Wastes were designated through testing
_____2. Wastes were designated by other means

Customer Certifies That:

1. The Waste sampled and intended for disposal under this Certification is special waste as defined in WAC 173-303-040.
2. The Waste has no free liquids per WAC 173-303-110 (3)(c)(i).

Signature _____ Date _____

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-9906, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9906, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9906, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-9906, filed 6/26/87. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9906, filed 2/10/82.]

WAC 173-303-9907 Reserved.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-9907, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-9907, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9907, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-9907, filed 6/26/87. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9907, filed 2/10/82.]

Chapter 173-304 WAC
MINIMUM FUNCTIONAL STANDARDS FOR SOLID WASTE HANDLING

WAC 173-304-010 Authority and purpose. This regulation is promulgated under the authority of chapter 70.95 RCW to protect public health, to prevent land, air, and water pollution, and conserve the state's natural, economic, and energy resources by:

(1) Setting minimum functional performance standards for the proper handling of all solid waste materials originating from residences, commercial, agricultural and industrial operations and other sources;

(2) Identifying those functions necessary to assure effective solid waste handling programs at both the state and local level;

(3) Following the direction set by the legislature for the management of solid waste in order of descending priority as applicable:

(a) Waste reduction;

(b) Waste recycling;

(c) Energy recovery or incineration;

(d) Landfill.

(4) Describing the responsibility of persons, municipalities, regional agencies, state and local government under existing laws and regulations related to solid waste;

(5) Requiring use of the best available technology for siting, and all known available and reasonable methods for designing, constructing, operating and closing solid waste handling facilities; and

(6) Establishing these standards as minimum standards for solid waste handling to provide a statewide consistency and expectation as to the level at which solid waste is managed throughout the state. Local ordinances setting standards for solid waste handling shall not be less stringent than these minimum standards, and shall be adopted not later than one year after the effective date of this regulation. Local ordinances need not adopt WAC 173-304-011, County planning requirements, but shall otherwise comply with the requirements of WAC 173-304-011. Solid waste regulations or ordinances adopted by counties, cities, or jurisdictional boards of health shall be filed with the department ninety days following adoption.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-010, filed 10/28/85.]

WAC 173-304-011 County planning requirements. The concept of "solid waste management" includes in addition to proper storage, collection, and disposal of discards, other management functions or operational activities including waste reduction, source separation, waste recycling, transportation, processing, treatment, resource recovery, energy recovery, incineration, and landfilling. Under the State Solid Waste Management Act, chapter 70.95 RCW, primary responsibility for managing solid waste is assigned to local government (RCW 70.95.020). The state, however, is responsible for assuring that effective local programs are established throughout Washington state. Therefore, state and local solid waste planning for the aforementioned activities is an essential part of proper solid waste management.

(1) State responsibility. As described in RCW 70.95.260, the department shall coordinate the development of a state solid waste management plan in cooperation with local government, the department of community development, and other appropriate state and regional agencies. The state plan shall be reviewed at two-year intervals, revised as necessary, and extended so that the plan shall look to the future for twenty years as a guide in carrying out a coordinated state solid waste management program.

(2) Local government responsibility. The overall purpose of local comprehensive solid waste planning is to determine the nature and extent of the various solid waste categories and to establish management concepts for their handling, utilization, and disposal consistent with the priorities established in RCW 70.95.010 for waste reduction, waste recycling, energy recovery and incineration, and landfill. Each local plan shall be prepared in accordance with RCW 70.95.080, 70.95.090, 70.95.100, and 70.95.110. Additionally, the department has available "Guidelines for the development of local or regional solid waste management plans and plan revisions" to be followed by local government. RCW 70.95.165 also requires counties to establish a local solid waste advisory committee to assist in the development of programs and policies concerning solid waste handling and disposal and to review and comment upon proposed rules, policies, or ordinances prior to their adoption.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-011, filed 10/28/85.]

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.

[Statutory Authority: Chapter 70.95 RCW. 87-15-049 (Order 87-3), § 173-304-012, filed 7/14/87.]

WAC 173-304-015 Applicability. These regulations apply to solid wastes as that term is defined in WAC 173-304-100. These regulations shall not apply to the following solid wastes:

(1) Overburden from mining operations intended for return to the mine;

(2) Liquid wastes whose discharge or potential discharge is regulated under federal, state or local water pollution permits;

(3) Dangerous wastes as defined by chapter 70.105 RCW and chapter 173-303 WAC;

(4) Woodwaste used for ornamental, animal bedding, mulch and plant bedding, or roadbuilding purposes;

(5) Agricultural wastes, limited to manures and crop residues, returned to the soils at agronomic rates;

(6) Clean soils and clean dredge spoils as defined in WAC 173-304-100 or as otherwise regulated by section 404 of the Federal Clean Water Act (PL 95-217);

(7) Septage taken to a sewage treatment plant permitted under chapter 90.48 RCW;

(8) Radioactive wastes, defined by chapters 402-12 and 402-19 WAC; and

(9) Wood debris resulting from the harvesting of timber and whose disposal is permitted under chapter 76.04 RCW, the State Forest Practices Act.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-015, filed 10/28/85.]

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.

(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 such a character and proportion as to be capable of attracting 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 other 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 1×10^{-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 septage, 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 rule-making 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.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-100, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-100, filed 10/28/85.]

WAC 173-304-130 Locational standards for disposal sites. (1) Applicability. These standards apply to all new and expanded disposal sites including landfills, landspreading disposal sites, and piles and surface impoundments that are to be closed as landfills. These standards do not apply to:

(a) Existing facilities or facilities that have engaged in closure and closed before the effective date of this regulation;

(b) Interim solid waste handling sites;

(c) Energy recovery and incineration sites;

(d) Piles and surface impoundments used for storage, unless otherwise referred to in WAC 173-304-400, Solid waste handling facility standards;

(e) Utilization of sludge and other waste on land;

(f) Inert wastes and demolition wastes as defined in WAC 173-304-100 unless otherwise referred to in WAC 173-304-400, Solid waste handling facility standards; and

(g) Problem wastes, as defined in WAC 173-304-100.

(2) Locational standards. All applicable solid waste facilities shall be subject to the following locational standards:

(a) Geology. No facility shall be located over a holocene fault, in subsidence areas, or on or adjacent to geologic features which could compromise the structural integrity of the facility.

(b) Ground water.

(i) No facility shall be located at a site where the bottom of the lowest liner is any less than ten feet above the seasonal high level of ground water in the uppermost aquifer, or five feet when a hydraulic gradient control system or the equivalent has been installed to control ground water fluctuations;

(ii) No landfill shall be located over a sole source aquifer; and

(iii) No facility's active area shall be located closer than one thousand feet to a down-gradient drinking water supply well, in use and existing at the time of the county's adoption of the comprehensive solid waste management plan unless the owner or operator can show that the active area is no less than ninety days travel time hydraulically to the nearest down-gradient drinking water supply well in the uppermost useable aquifer.

(c) Natural soils. See WAC 173-304-400, such as WAC 173-304-460 (3)(c)(i), landfill liners;

(d) Flooding. See WAC 173-304-400 such as WAC 173-304-460 (3)(d), landfill, floodplains;

(e) Surface water. No facility's active area shall be located within two hundred feet measured horizontally, of a stream, lake, pond, river, or salt water body, nor in any wetland nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4);

(f) Slope. No facility's active area shall be located on any hill whose slope is unstable;

(g) Cover material. See WAC 173-304-400, such as WAC 173-304-460 (3)(e), landfills, closure;

(h) Capacity. See WAC 173-304-400, such as WAC 173-304-460, Landfilling standards, (for standards that vary according to capacity);

(i) Climatic factors. See WAC 173-304-400 such as WAC 173-304-460(3) landfill standards, (for standards applicable to arid climates);

(j) Land use. No facility shall be located:

(i) Within ten thousand feet of any airport runway currently used by turbojet aircraft or five thousand feet of any airport runway currently used by only piston-type aircraft unless a waiver is granted by the federal aviation administration. This requirement is only applicable where such facility is used for disposing of garbage such that a bird hazard to aircraft would be created;

(ii) In areas designated by the United States Fish and Wildlife Service or the department of game as critical habitat for endangered or threatened species of plants, fish, or wildlife;

(iii) So that the active area is any closer than one hundred feet to the facility property line for land zoned as nonresidential, except that the active area may be no closer than two hundred and fifty feet to the property line of adjacent land zoned as residential existing at the time of the county's adoption of the comprehensive solid waste management plan;

(iv) So as to be at variance with any locally-adopted land use plan or zoning requirement unless otherwise provided by local law or ordinance; and

(v) So that the active area is any closer than one thousand feet to any state or national park.

(k) Toxic air emissions. See WAC 173-304-400 such as WAC 173-304-460 (2)(b), landfill performance standards.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-130, filed 10/28/85.]

WAC 173-304-190 Owner responsibilities for solid waste. The owner, operator, or occupant of any premise, business establishment, or industry shall be responsible for the satisfactory and legal arrangement for the solid waste handling of all solid waste accumulated by them on the property.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-190, filed 10/28/85.]

WAC 173-304-195 Permit required. After approval by the department of the comprehensive solid waste plan required by RCW 70.95.100, no solid waste disposal site or facility shall be maintained, established, substantially altered, expanded or improved until the county, city or other person operating or owning such site has obtained a permit from the jurisdictional health department pursuant to the provisions of WAC 173-304-600.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-195, filed 10/28/85.]

WAC 173-304-200 On-site containerized storage, collection and transportation standards for solid waste. (1) Applicability. These standards apply to all persons storing containerized solid waste generated on-site, and to all persons who are engaged in the collection and transportation of solid waste of more than one single family residence or single family farm including collection and transportation of septage and septic tank pumpings.

(2) On-site storage standards.

(a) The owner or occupant of any premises, business establishment, or industry shall be responsible for the safe and sanitary storage of all containerized solid wastes accumulated at that premises.

(b) The owner, operator, or occupant of any premises, business establishment, or industry shall store containerized solid wastes in containers that meet the following requirements:

(i) Disposable containers shall be sufficiently strong to allow lifting without breakage and shall be thirty-two gallons in capacity or less where manual handling is practiced;

(ii) Reusable containers, except for detachable containers, shall be:

(A) Rigid and durable;

(B) Corrosion resistant;

(C) Nonabsorbent and water tight;

(D) Rodent-proof and easily cleanable;

(E) Equipped with a close fitting cover;

(F) Suitable for handling with no sharp edges or other hazardous conditions; and

(G) Equal to or less than thirty-two gallons in volume where manual handling is practiced.

(iii) Detachable containers shall be durable, corrosion-resistant, nonabsorbent, nonleaking and having either a solid cover or screen cover to prevent littering.

(3) Collection and transportation standards.

(a) All persons collecting or transporting solid waste shall avoid littering, or the creation of other nuisances at the loading point, during transport and for the proper unloading of the solid waste at a permitted transfer station, or other permitted solid waste handling site.

(b) Vehicles or containers used for the collection and transportation of solid waste shall be tightly covered or screened where littering may occur, durable and of easily cleanable construction. Where garbage is being collected or

transported, containers shall be cleaned as necessary to prevent nuisances, odors and insect breeding and shall be maintained in good repair.

(c) Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such manner that the contents will not fail, leak in quantities to cause a nuisance, or spill therefrom. Where such spillage or leakage does occur, the waste shall be picked up immediately by the collector or transporter and returned to the vehicle or container and the area otherwise properly cleaned.

(d) All persons commercially collecting or transporting solid waste shall inspect collection and transportation vehicles monthly, for repairs to containers such as missing or loose-fitting covers or screens, leaking containers, etc., and maintain such inspection records at the facility normally used to park such vehicles or such other location that maintenance records are kept. Such records shall be kept for a period of at least two years, and be made available upon the request of the jurisdictional health department.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-200, filed 10/28/85.]

WAC 173-304-300 Waste recycling facility standards. (1) Applicability.

(a) These standards apply to facilities engaged in recycling or utilization of solid waste on the land, including but not limited to:

(i) Noncontainerized composting in piles;

(ii) Utilization of sewage sludge, septage and other organic wastes on land for beneficial use;

(iii) Accumulation of wastes in piles for recycling or utilization.

(b) These standards do not apply to:

(i) Single family residences and single family farms engaged in composting of their own wastes;

(ii) Facilities engaged in the recycling of solid waste containing garbage, such as garbage composting, which are subject to WAC 173-304-400, Solid waste handling facility standards;

(iii) Facilities engaged in the storage of tires which are subject to WAC 173-304-400, Solid waste handling facility standards;

(iv) Problem wastes as defined in WAC 173-304-100;

(v) Facilities engaged in recycling of solid waste stored in surface impoundments which are subject to WAC 173-304-400, Solid waste handling facility standards; and

(vi) Woodwaste or hog fuel piles to be used as fuel or raw materials stored temporarily in piles being actively used so long as the criteria of WAC 173-304-300 (3)(c)(i) are met.

(c) These standards do not apply to any facility that recycles or utilizes solid wastes in containers, tanks, vessels, or in any enclosed building, including buy-back recycling centers.

(2) Effective dates. All existing facilities recycling solid waste not in conformance with this section shall be placed upon a compliance schedule under WAC 173-304-600(1) to assure compliance within two years of the effective date of this regulation.

(3) Waste recycling requirements.

(a) All applicable solid waste recycling facilities shall apply for and obtain a solid waste permit under WAC 173-304-600, permits.

(b) Applicable waste recycling facilities shall submit annual reports to the jurisdictional health department and the department by March 1 of the following year for which the data is collected on forms supplied by the department. The annual reports shall include quantities and types of waste recycled for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4). Such facilities may request and be assured of confidentiality for their reports in accordance with chapter 42.17 RCW and RCW 43.21A.160.

(c) All facilities storing solid waste in outdoor piles or surface impoundments for the purpose of waste recycling shall be considered to be storing or disposing of solid waste if:

(i) At least fifty percent of the material has not been shown to have been recycled in the past three years and any material has been on-site more than five years; or

(ii) Ground water or surface water, air, and/or land contamination has occurred or will likely occur under current conditions of storage or in case of fire, or flood.

Upon such a determination by the jurisdictional health department that (c)(i) or (ii) of this subsection are met, the jurisdictional health department may require a permit application and issuance of a permit under WAC 173-304-600 of these rules.

(d) Waste recycling facilities shall allow jurisdictional health department and department representatives entry for inspection purposes and to determine compliance with these rules at reasonable times.

(e) All applicable waste recycling facilities shall not conflict with the county comprehensive solid waste management plan required by WAC 173-304-011 of these rules.

(f) All waste recycling facilities shall comply with applicable local, state and federal laws and regulations, including but not limited to environmental regulations and laws.

(4) Sewage sludge utilization requirements.

In addition to the requirements of subsection (3) of this section, all facilities utilizing sewage sludge, including septage shall comply with the department's *Municipal and Domestic Sludge Utilization Guidelines* WDOE 82-11, dated September 1982 or as hereafter amended. Facilities utilizing sewage sludge on the land in a manner not consistent with nor meeting the requirement of the guidelines are required to meet the landspreading disposal standards of WAC 173-304-450.

(5) Woodwaste and other organic sludge utilization requirements.

(a) Facilities utilizing woodwaste not otherwise excluded under WAC 173-304-015, shall comply with these recycling standards. Applying woodwaste and other primarily organic sludges such as pulp and paper mill treatment sludges to the land shall be in a manner consistent with the *Municipal and Domestic Sludge Utilization Guidelines* WDOE 82-11 dated September 1982 or as hereafter amended. Only agricultural or silvicultural sites where such sludges are demonstrated to have soil conditioning or fertil-

izer value shall be acceptable, provided that the woodwaste and other primarily organic sludges are applied as a soil conditioner or fertilizer in accordance with accepted agricultural and silvicultural practice. Facilities utilizing woodwaste or other primarily organic sludges on the land in a manner not consistent with nor meeting the requirement of the guidelines are required to meet the landspreading disposal standards of WAC 173-304-450.

(b) Facilities utilizing woodwaste or other primarily organic sludges shall also comply with the standards of subsection (3) of this section.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-300, filed 10/28/85.]

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.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-400, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-400, filed 10/28/85.]

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 so modified with the approval of the jurisdictional health 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.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-405, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-405, filed 10/28/85.]

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 173-304-410 Transfer stations, baling and compaction systems, and drop box facilities. (1) Applicability. All transfer stations, baling and compaction systems and drop boxes receiving solid waste from off-site shall meet the requirements of this section. Facilities receiving solid waste from on-site shall meet the requirements of WAC 173-304-200.

(2) Transfer stations, baling and compacting systems standards. Transfer stations, baling and compaction systems shall be designed, constructed, and operated so as to:

(a) Be surrounded by a fence, trees, shrubbery, or natural features so as to control access and be screened from the view of immediately adjacent neighbors, unless the tipping floor is fully enclosed by a building;

(b) Be sturdy and constructed of easily cleanable materials;

(c) Be free of potential rat harborages, and provide effective means to control rodents, insects, birds and other vermin;

(d) Be adequately screened to prevent blowing of litter and to provide effective means to control litter;

(e) Provide protection of the tipping floor from wind, rain or snow other than below grade bins or detachable containers;

(f) Have an adequate buffer zone around the operating area to minimize noise and dust nuisances, and for transfer stations, baling, or compaction systems, a buffer zone of fifty feet from the active area to the nearest property line in areas zoned residential;

(g) Comply with local zoning and building codes including approved local variances and waivers;

(h) Provide pollution control measures to protect surface and ground waters, including run-off collection and discharge designed and operated to handle a twenty-four hour, twenty-five year storm and equipment cleaning and washdown water;

(i) Provide all-weather approach roads, exit roads, and all other vehicular areas;

(j) Provide pollution control measures to protect air quality including a prohibition against all burning and the development of odor and dust control plans to be made a part of the plan of operation in WAC 173-304-405(2);

(k) Prohibit scavenging;

(l) Provide attendant(s) on-site during hours of operation;

(m) Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what constitutes materials not to be accepted and other necessary information posted at the site entrance;

(n) Have communication capabilities to immediately summon fire, police, or emergency service personnel in the event of an emergency; and

(o) Remove all wastes at closure, as defined in WAC 173-304-100, from the facility to a permitted facility.

(3) Drop box facility standards. Drop box facilities, as defined in WAC 173-304-100, shall:

(a) Be constructed of durable water tight materials with a lid or screen on top that prevents the loss of materials during transport and access by rats and other vermin;

(b) Be located in an easily identifiable place accessible by all-weather roads;

(c) Be designed and serviced as often as necessary to ensure adequate dumping capacity at all times. Storage of solid waste outside the drop boxes is prohibited;

(d) Comply with subsection (2)(m) of this section, signs; and

(e) Remove all remaining wastes at closure, as defined in WAC 173-304-100, to a permitted facility, and remove the drop box from the facility.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-410, filed 10/28/85.]

WAC 173-304-420 Piles used for storage and treatment—Facility standards. (1) Applicability.

(a) This section is applicable to solid wastes stored or treated in piles as defined in WAC 173-304-100 where putrescible wastes (other than garbage) are in place for more than three weeks, other wastes not intended for recycling are in place for more than three months, and garbage is in place for more than three days. These standards are also applicable to composting or storing of garbage and sludge in piles, and to tire piles where more than eight hundred tires are stored at one facility.

(b) Other solid wastes stored or treated in piles prior to waste recycling including compost piles of vegetative waste, piles of woodwaste used for fuel or raw materials are subject to WAC 173-304-300.

(c) Waste piles stored in fully enclosed buildings are not subject to these standards, provided that no liquids or sludges with free liquids are added to the pile.

(d) Inert wastes and demolition wastes are not subject to these standards.

(2) Requirements. All owners and operators shall:

(a) Comply with the requirements of the General facility requirements, WAC 173-304-405;

(b) Design piles located in a one hundred year flood plain to:

(i) Comply with local flood plain management ordinances and chapter 508-60 WAC, Administration of flood control zones; and

(ii) To avoid washout or restriction of flow; and

(c) Remove all solid wastes from the pile at closure to another permitted facility.

(3) Requirements for putrescible wastes or wastes likely to produce leachate.

(a) Waste piles shall be placed upon a surface such as sealed concrete, asphalt, clay or an artificial liner underlying the pile, to prevent subsurface soil and potential ground water contamination and to allow collection of run-off and leachate. The liner shall be designed of sufficient thickness and strength to withstand stresses imposed by pile handling vehicles and the pile itself;

(b) Run-off systems shall be installed, designed and maintained to handle a twenty-four hour, twenty-five year storm event;

(c) Waste piles having a capacity of greater than ten thousand cubic yards shall have either:

(i) A ground water monitoring system that complies with WAC 173-304-490; or

(ii) A leachate detection, collection and treatment system.

For purposes of this subsection, capacity refers to the total capacity of all putrescible or leachate-generating piles at one facility (i.e., two, five thousand cubic yard piles will subject the facility to the requirements of this subsection).

(d) Run-on prevention systems shall be designed and maintained to handle the maximum flow from a twenty-five year storm event; and

(e) A jurisdictional health department may require that the entire base or liner shall be inspected for wear and integrity and repaired or replaced by removing stored wastes or otherwise providing inspection access to the base or liner; the request shall be in writing and cite the reasons including valid ground water monitoring or leachate detection data leading the jurisdictional health department to request such an inspection, repair or replacement.

(4) Requirements for tire piles. Owners or operators shall:

(a) Control access to the tire pile by fencing;

(b) Limit the tire pile to a maximum of one-half acre in size;

(c) Limit the height of the tire pile to twenty feet;

(d) Provide for a thirty foot fire lane between tire piles; and

(e) Provide on-site fire control equipment.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-420, filed 10/28/85.]

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 173-304-440 Energy recovery and incinerator standards. (1) Applicability. These standards apply to all facilities designed to burn more than twelve tons of solid waste per day, except for facilities burning woodwaste or gases recovered at a landfill.

(2) Requirements for energy recovery facilities and incinerators.

(a) Incinerators and energy recovery facilities storing putrescible wastes shall be confined to storage compartments specifically designed to store wastes temporarily in piles, surface impoundments, tanks or containers. The storage facilities shall meet the facility standards of WAC 173-304-400. Storage of wastes other than in the specifically designed storage compartments is prohibited. Equipment and space shall be provided in the storage and charging areas, and elsewhere as needed, to allow periodic cleaning as may be required in order to maintain the plant in a sanitary and clean condition;

(b) All residues from energy recovery facilities or incinerator facilities shall be used, handled or disposed of as solid or dangerous wastes according to these standards or the standards of the dangerous waste regulation, chapter 173-303 WAC;

(c) Each owner or operator of an energy recovery facility or incinerator facility shall comply with WAC 173-304-405. The plan of operation shall address alternative storage, and/or disposal plans for all breakdowns that would result in overfilling of the storage facility;

(d) Energy recovery facilities and incinerators must be designed, constructed and operated in a manner to comply with appropriate state and local air pollution control authority emission and operating requirements;

(e) Each owner or operator shall close their energy recovery facility or incinerator by removing all ash, solid wastes and other residues to a permitted facility;

(f) Each owner or operator of an energy recovery facility or incinerator shall be required to provide recycling facilities in a manner equivalent to WAC 173-304-460 (4)(f); and

(g) Owners or operators of energy recovery facilities or incinerators shall not knowingly dispose of, treat, store or otherwise handle dangerous waste unless the requirements of chapter 173-303 WAC are met.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-440, 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.

(6) Minimum functional standards for closure.

(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.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-450, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-450, filed 10/28/85.]

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.

(2) Minimum functional standards for performance.

(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 1×10^{-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 1×10^{-6} 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 1×10^{-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 1×10^{-5} 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 mea-

suring 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) harborages 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;

(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:

(i) Control road dust;

(ii) 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.

(iii) Collect scattered litter as necessary to avoid a fire hazard or an aesthetic nuisance;

(iv) 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

(v) The ground water monitoring standards of WAC 173-304-490.

(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 his 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.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-460, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-460, filed 10/28/85.]

WAC 173-304-461 Inert waste and demolition waste landfilling facility requirements. (1) Applicability. These standards apply to facilities that landfill more than two thousand cubic yards of inert wastes and demolition wastes, as defined in WAC 173-304-100, including facilities that use inert waste and demolition waste as a component of fill. Inert wastes and demolition wastes used as road building materials are excluded from this section. These standards do not apply to asbestos containing waste regulated under the federal 40 CFR Part 61 rules and the dangerous waste regulation, chapter 173-303 WAC.

(2) Inert wastes and demolition waste landfilling facilities shall not be subject to the Locational standards for disposal sites, WAC 173-304-130 except for WAC 173-304-130 (2)(f), slope.

(3) Owners or operators of inert waste and demolition waste landfill shall maintain a record of the weights or volumes and types of waste disposed of at each site.

(4) Owners or operators of inert wastes and demolition landfills shall employ measures to prevent emission of fugitive dusts, when weather conditions or climate indicate that transport of dust off-site is liable to create a nuisance. Preventative measures include watering of roads and covering.

(5) Timbers, wood and other combustible waste shall be covered as needed during the summer months to avoid a fire hazard.

(6) Owners or operators of inert wastes and demolition landfills shall close the facility by leveling the wastes to the extent practicable and shall fill any voids posing a physical hazard for persons after closure and to maintain an aesthetic appearance. A minimum of one foot of soil cover shall be used to close landfills.

(7) Owners or operators of inert waste and demolition waste landfills shall obtain a permit, as set forth in WAC 173-304-600 from the jurisdictional health department.

(8) Owners or operators of inert wastes and demolition landfills shall meet the requirements of WAC 173-304-405(7), recording with the county auditor.

(9) Owners or operators of inert waste or demolition waste landfills shall not accept any other form of waste except inert waste and demolition waste.

(10) Owners or operators of inert waste and demolition waste landfills shall prevent unauthorized disposal during off-hours by controlling entry (i.e., lockable gate or barrier) when the facility is not being used.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-461, filed 10/28/85.]

WAC 173-304-462 Woodwaste landfilling facility requirements. (1) Applicability. These requirements apply to facilities that landfill more than two thousand cubic yards of woodwaste including facilities that use woodwaste as a component of fill. Woodwaste is defined in WAC 173-304-100. These standards are not applicable to woodwaste landfills on forest lands regulated under the Forest Practices Act, chapter 76.09 RCW.

(2) Minimum functional standards.

(a) Woodwaste landfills are not subject to WAC 173-304-130 standards, Locational standards for disposal sites, except for WAC 173-304-130 (2)(e) surface water locational standards and WAC 173-304-130 (2)(b)(iii) down gradient drinking water supply wells. Woodwastes may be used as a component of fill within a shoreline and associated wetlands only if a demonstrated and proven technology to prevent ground and surface water contamination is used.

(b) Owners or operators of woodwaste landfills shall maintain a record of the weights or volumes of waste disposed of at each facility.

(c) Owners or operators of woodwaste landfills shall not accept any other wastes except woodwaste.

(d) Owners or operators of woodwaste landfills shall prevent run-on from a maximum twenty-five year storm.

(e) All wood waste landfills having a capacity of greater than ten thousand cubic yards at closure shall either:

(i) Have a ground water monitoring system that complies with WAC 173-304-490 and the woodwaste landfill meet the performance standards of WAC 173-304-460(2); or

(ii) Have a leachate collection and treatment system.

(f) Owners or operators of woodwaste landfills shall not deposit woodwaste in lifts to a height of more than ten feet per lift with at least one foot of cover material between lifts to avoid hot spots and fires in the summer and to avoid excessive build-up of leachate in the winter, and shall compact woodwaste as necessary to prevent voids.

(g) Owners or operators of woodwaste landfills shall prevent unauthorized disposal during off-hours by controlling entry (i.e., lockable gate or barrier), when the facility is not being used.

(h) Owners or operators of woodwaste landfills shall close the facility by leveling and compacting the wastes and applying a compacted soil cover of at least two feet thickness.

(i) Owners or operators of woodwaste landfills shall obtain a permit as set forth in WAC 173-304-600 from the jurisdictional health department.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-462, filed 10/28/85.]

WAC 173-304-463 Problem waste landfills. (Reserved.)

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-463, filed 10/28/85.]

WAC 173-304-467 Financial assurance for public facilities. (1) Applicability.

(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-owned 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 clo-

sure 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 prepared 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 subsection (2) of this section unless otherwise specified.

(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 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 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) For disposal facilities as categorized in subsection (1)(b) of this section, established post-closure financial assurance accounts shall not constitute an asset of the facility owner or operator.

(c) For applicable disposal facilities of this section any income accruing to the established post-closure financial assurance account will be at the owner's discretion as to the use of said excess funds.

(d) Excess moneys remaining in the post-closure financial assurance account after the completion of all identified post-closure activities shall be released to the facility owner or operator.

(6) Closure/post-closure financial assurance account establishment and reporting.

(a) Closure and post-closure financial assurance funds shall be generated at each facility by transferring a percentage of the facility user fees to the selected financial assurance instrument at the schedule specified in the closure and post-closure plans, such that adequate closure and post-closure funds will be generated to ensure full implementation of the approved closure and post-closure plans.

(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.]

WAC 173-304-468 Financial assurance for private landfill disposal facilities. (1) Applicability.

(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.

(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 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 pay the amount of the bond into the standby closure or post-closure trust account;

(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 notifi-

cation 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 working 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 shall provide an alternative form of financial assurance consistent with the requirements of this section; that guarantees that the permittee's chief financial officer 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 subsec-

tion, 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 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), § 173-304-468, filed 10/4/88.]

WAC 173-304-470 Other methods of solid waste handling. (1) Applicability. This section applies to other methods of solid waste handling such as a material resource recovery system for municipal waste not specifically identified elsewhere in this regulation, nor excluded from this regulation.

(2) Requirements. Owners and operators of other methods of solid waste handling shall:

(a) Comply with the requirements in WAC 173-304-405;

(b) Obtain a permit under WAC 173-304-600 from the jurisdictional health department, by submitting an application containing information required in WAC 173-304-600 (3)(a), and such other information as may be required by the jurisdictional health department and the department, including:

(i) Preliminary engineering reports and plans and specifications; and

(ii) A closure plan.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-470, filed 10/28/85.]

WAC 173-304-490 Ground water monitoring requirements. (1) Applicability. These requirements apply to owners and operators of landfills, piles, landspreading disposal facilities, and surface impoundments that are required to perform ground water monitoring under WAC 173-304-400.

(2) Ground water monitoring requirements.

(a) The ground water monitoring system must consist of at least one background or upgradient well and three down gradient wells, installed at appropriate locations and depths to yield ground water samples from the upper most aquifer and all hydraulically connected aquifers below the active portion of the facility.

(i) Represent the quality of background water that has not been affected by leakage from the active area; and

(ii) Represent the quality of ground water passing the point of compliance. Additional wells may be required by the jurisdictional health department in complicated hydrogeological settings or to define the extent of contamination detected.

(b) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must allow collection of representative ground water samples. Wells must be constructed in such a manner as to prevent contamination of the samples, the sampled strata, and between aquifers and water bearing strata and in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of water wells.

(c) The ground water monitoring program must include at a minimum, procedures and techniques for:

(i) Decontamination of drilling and sampling equipment;

(ii) Sample collection;

(iii) Sample preservation and shipment;

(iv) Analytical procedures and quality assurance;

(v) Chain of custody control; and

(vi) Procedures to ensure employee health and safety during well installation and monitoring.

(d) Sample constituents.

(i) All facilities shall test for the following parameters:

(A) Temperature;

(B) Conductivity;

(C) pH;

(D) Chloride;

(E) Nitrate, nitrite, and ammonia as nitrogen;

(F) Sulfate;

(G) Dissolved iron;

(H) Dissolved zinc and manganese;

(I) Chemical oxygen demand;

(J) Total organic carbon; and

(K) Total coliform.

(ii) The jurisdictional health department in consultation with the department may specify additional or fewer constituents depending upon the nature of the waste; and

(iii) Test methods used to detect the parameters of (d)(i) of this subsection shall be EPA Publication Number SW-846, *Test Methods for Evaluating Solid Waste - Physical/Chemical Methods*except for total coliform which shall use the latest edition of *Standard Methods for the Examination of Water and Wastewater.*

(e) The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

(f) The owner or operator shall use a statistical procedure for determining whether a significant change over background has occurred. The jurisdictional health department will approve such a procedure with the guidance of the department.

(g) The owner or operator must determine ground water quality at each monitoring well at the compliance point at least quarterly during the life of an active area (including the closure period) and the post-closure care period. The owner or operator must express the ground water quality at each monitoring well in a form necessary for the determination of statistically significant increases.

(h) The owner or operator must determine and report the ground water flow rate and direction in the uppermost aquifer at least annually.

(i) If the owner or operator determines that there is a statistically significant increase for parameters or constituents at any monitoring well at the compliance point, the owner or operator must:

(i) Notify the jurisdictional health department of this finding in writing within seven days of receipt of the sampling data. The notification must indicate what parameters or constituents have shown statistically significant increases;

(ii) Immediately resample the ground water in all monitoring wells and determine the concentration of all constituents listed in the definition of contamination in WAC 173-304-100 including additional constituents identified in the permit and whether there is a statistically significant increase such that the ground water performance standard has been exceeded, and notify the jurisdictional health department within fourteen days of receipt of the sampling data.

(j) The jurisdictional health department may require corrective action programs including facility closure if the performance standard of WAC 173-304-460 (2)(a) is exceeded and, in addition, may revoke any permit and require reapplication under WAC 173-304-600.

(3) Corrective action program. An owner or operator required to establish a corrective action program under this section must, at a minimum with the approval of the jurisdictional health officer:

(a) Implement a corrective action program that reduces contamination and if possible prevents constituents from exceeding their respective concentration limits at the compliance point by removing the constituents, treating them in place, or other remedial measures;

(b) Begin corrective action according to a written schedule after the ground water performance standard is exceeded;

(c) Terminate corrective action measures once the concentrations of constituents are reduced to levels below the limits under WAC 173-304-460 (2)(a).

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-490, filed 10/28/85.]

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 cleanup 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.

(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 onsite 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 land-spreading 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.

(h) Application contents for new or expanded inert waste and demolition waste, special purpose landfill, woodwaste landfills, and recycling facilities.

Applications for permits subject to the standards of WAC 173-304-300, 173-304-460(5), 173-304-461, and 173-304-462 shall be on forms whose content shall be specified by the jurisdictional health department.

(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.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-600, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-600, filed 10/28/85.]

WAC 173-304-700 Variances. (1) Any person who owns or operates a solid waste facility may apply to the jurisdictional health officer for a variance from any section of this regulation. The application shall be accompanied by such information as the jurisdictional health department may require. The jurisdictional health department may grant such variance, but only after due notice or a public hearing if requested, if it finds that:

(a) The solid waste handling practices or location do not endanger public health, safety or the environment; and

(b) Compliance with the regulation from which variance is sought would produce hardship without equal or greater benefits to the public.

(2) No variance shall be granted pursuant to this section until the jurisdictional health department has considered the relative interests of the applicant, other owners of property likely to be affected by the handling practices and the general public.

(3) Any variance or renewal shall be granted within the requirements of subsection (1) of this section and for time

period and conditions consistent with the reasons therefor, and within the following limitations:

(a) If the variance is granted on the ground that there is no practicable means known or available for the adequate prevention, abatement, or control of pollution involved, it shall be only until the necessary means for prevention, abatement or control become known and available and subject to the taking of any substitute or alternative measures that the jurisdictional health department may prescribe;

(b) The jurisdictional health department may grant a variance conditioned by a time table if:

(i) Compliance with the regulation will require spreading of costs over a considerable time period; and

(ii) The time table is for a period that is needed to comply with the regulation.

(4) Any variance granted pursuant to this section may be renewed on terms and conditions and for periods which would be appropriate on initial granting of a variance. No renewal thereof shall be granted, unless following a public hearing on the complaint or due notice, the jurisdictional health department finds the renewal is justified. No renewal shall be granted except on application. Any such application shall be made at least sixty days prior to the expiration of the variance. Immediately upon receipt of an application for renewal, the jurisdictional health department shall give public notice of such application in accordance with rules and regulations of the jurisdictional health department.

(5) An application for a variance, or for the renewal thereof, submitted to the jurisdictional health department shall be approved or disapproved by the jurisdictional health department within ninety days of receipt unless the applicant and the jurisdictional health department agree to a continuance.

(6) No variance shall be granted by a jurisdictional health department except with the approval and written concurrence of the department prior to action on the variance by the jurisdictional health department.

(7) Variances granted by a jurisdictional health department will be accepted as variances under this regulation.

(8) Public notice shall be given by mailing a notice of the variance application to persons who have written to the jurisdictional health department asking to be notified of all variance requests.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-700, filed 10/28/85.]

WAC 173-304-9901 Maximum contaminant levels for ground water. Maximum contaminant levels for ground water shall be those specified in chapter 248-54 WAC, as the primary drinking water standards. Analytical methods for these contaminants may be found in the Code of Federal Regulations 40 CFR Part 141. (These contaminant levels are to be considered interim levels for the purpose of regulating solid waste handling facilities and shall be used until such time as the department establishes ground water quality standards for all types of activities impacting ground water.)

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-9901, filed 10/28/85.]

Chapter 173-305 WAC
HAZARDOUS WASTE FEE REGULATION

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-305-060 Facility fees. [Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-060, filed 2/7/84.] Repealed by 92-10-043 (Order 92-09), filed 5/5/92, effective 6/5/92. Statutory Authority: Chapter 70.95E RCW.

173-305-070 Schedule of facility fees. [Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-070, filed 2/7/84.] Repealed by 92-10-043 (Order 92-09), filed 5/5/92, effective 6/5/92. Statutory Authority: Chapter 70.95E RCW.

173-305-080 Assessments for combined sites. [Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-080, filed 2/7/84.] Repealed by 92-10-043 (Order 92-09), filed 5/5/92, effective 6/5/92. Statutory Authority: Chapter 70.95E RCW.

173-305-090 Adjustment of fees and limits. [Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-090, filed 2/7/84.] Repealed by 92-10-043 (Order 92-09), filed 5/5/92, effective 6/5/92. Statutory Authority: Chapter 70.95E RCW.

PART A
GENERAL

WAC 173-305-010 Purpose. This rule implements the provisions of chapter 70.95E RCW, establishing a means for funding technical assistance and compliance education assistance to hazardous substance users and waste generators in this state. Technical assistance includes, but is not limited to, assistance in the preparation of plans and review of plans and related documents. The purpose of this chapter is to describe the methods by which the department of ecology will assess certain fees, to whom fees will be assessed, the amount of those fees, provisions for exemption from and enforcement of fee assessments, responsibilities of the department of ecology, and procedures for adjusting the fees. Copies of all rules and statutes cited in this chapter are available from Records Management, Department of Ecology, P.O. Box 47600, Olympia, WA, 98504-7600.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-010, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-010, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-010, filed 2/7/84.]

WAC 173-305-015 Applicability. The requirements of WAC 173-305-010 through 173-305-120 apply to all persons who are hazardous waste generators, including state and local entities as well as instrumentalities of the United States. The requirements of WAC 173-305-010 through 173-305-050 and 173-305-210 through 173-305-240 apply to all persons required to prepare plans under RCW 70.95C.200.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-015, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-015, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-015, filed 2/7/84.]

WAC 173-305-020 Definitions. Any terms not specifically defined in this section, for the purposes of this chapter, have the same meaning as given in WAC 173-303-040. The following terms are defined for the purposes of this chapter:

(1) "Additional fee" means the annual fee imposed under chapter 70.95E RCW against hazardous generators and hazardous substance users required to prepare plans;

(2) "Base fee" means the annual fee imposed under chapter 70.95E RCW against hazardous waste generators doing business in the state of Washington;

(3) "Business activities" means activities of any person who is "engaging in business" as the term is defined in chapter 82.04 RCW. Specifically, "engaging in business" means commencing, conducting, or continuing in business and also the exercise of corporate or franchise powers as well as liquidating a business when the liquidates thereof hold themselves out to the public as conducting such business;

(4) "Dangerous waste" means any discarded, useless, unwanted, or abandoned nonradioactive substances including, but not limited to, certain pesticides, or any residues or containers of those kinds of substances that are disposed of in a quantity or concentration that would pose a substantial present or potential hazard to human health, wildlife, or the environment because those wastes or constituents or combinations of those kinds of wastes:

(a) Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or

(b) Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.

"Dangerous wastes" specifically includes those wastes designated as dangerous by chapter 173-303 WAC;

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

(6) "Emissions" means the substances released to the environment that must be reported under toxic chemical release reporting, 40 CFR Part 372;

(7) "EPA/state identification number" means the number assigned by the environmental protection agency (EPA) or by the department of ecology to each generator or transporter or both, and to each treatment facility, or storage facility, or disposal facility, or a treatment, storage, and disposal facility;

(8) "Extremely hazardous waste" means any dangerous waste that:

(a) Will persist in a hazardous form for several years at a disposal site and which, in its persistent form:

(i) Presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic make-up of man or wildlife; and

(ii) Is highly toxic to man and wildlife;

(b) If disposed of at a disposal site in quantities that would present an extreme hazard to man or the environment.

"Extremely hazardous waste" specifically includes those wastes designated as extremely hazardous by chapter 173-303 WAC;

(9) "Facility" means any geographical area that has been assigned an EPA/state identification number or in the case of a hazardous substance user, means all buildings, equipment, structures, and other stationary items located on a single site or on contiguous or adjacent sites and owned or operated by the same person;

(10) "Generate" means any act or process that produces hazardous waste or first causes a hazardous waste to become subject to regulation;

(11) "Hazardous waste" includes all dangerous and extremely hazardous wastes but, for the purposes of this chapter, excludes all radioactive wastes or substances composed of both radioactive and hazardous components;

(12) "Hazardous waste generator" means all persons whose primary business activities are identified by the department to generate any quantity of hazardous waste in the calendar year for which the fee is imposed.

(13) "Interrelated facility" means multiple facilities owned or operated by the same person;

(14) "Person" means an individual, trust, firm, joint stock company, partnership, association, state, public or private or municipal corporation, commission, political subdivision of a state, interstate body, the federal government including any agency or officer thereof, and any Indian tribe or authorized tribal government;

(15) "Plan" means the plan provided for in RCW 70.95C.200;

(16) "Price deflator" means the United States Department of Commerce Bureau of Economic Analysis, "Implicit price deflator for gross national product for government purchases of goods and services for state and local government."

(17) "Primary business activity" means a business activity that accounts for more than fifty percent of a business' total gross receipts or in the case of more than two business activities, the activity which has the largest gross receipts. Where a business engages in multiple activities and one or more of those activities generate hazardous waste, the gross receipts from all waste generating activities will be combined to determine their ratio to the total gross receipts of the business.

(18) "Recycled for beneficial use" means the use of hazardous waste, either before or after reclamation, as a substitute for a commercial product or raw material, but does not include:

(a) Use constituting disposal;

(b) Incineration; or

(c) Use as a fuel.

(19) "Substantially similar processes" means processes that are essentially interchangeable, inasmuch as they use similar equipment and materials and produce similar products or services and generate similar wastes.

(20) "Waste generation site" means any geographical area that has been assigned an EPA/state identification number.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-020, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-020, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-020, filed 2/7/84.]

WAC 173-305-030 Penalty for failure to pay the fee. If a known or potential generator or a person required to prepare a plan fails to pay all or any part of a fee imposed under this chapter, the department of revenue shall charge a penalty of three times the amount of the unpaid fee. The department of revenue shall waive any penalty in accordance with RCW 82.32.105. Note: See WAC 458-20-228 for a discussion of the circumstances under which a penalty may be waived.

[Statutory Authority: Chapter 70.95E RCW. 91-08-040 (Order 90-56), § 173-305-030, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-030, filed 2/7/84.]

WAC 173-305-040 Adjustment of fees. On an annual basis, the department shall adjust the fees provided for by this chapter, including the maximum annual fee and the maximum total fees, by conducting the calculation in subsection (1) of this section and taking the actions set forth in subsection (2) of this section:

(1) In November of each year, the base fee and the additional fee, or the fees as subsequently adjusted by this section, must be multiplied by a factor equal to the most current quarterly "price deflator" available, and divided by the "price deflator" used in the numerator the previous year. However, the "price deflator" used in the denominator for the first adjustment must be divided by the second quarter "price deflator" for 1990.

(2) Each year by March 1, the schedule, as adjusted in subsection (1) of this section, will be published. The department will round the published fees to the nearest dollar.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-040, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-040, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-040, filed 2/7/84.]

WAC 173-305-050 General administrative provisions. With the exception of RCW 82.32.050 and 82.32.090, the review provisions contained in chapter 82.32 RCW, apply to the collection and enforcement of fees imposed under this chapter. Requests for administrative review should be directed to the State of Washington, Department of Ecology, P.O. Box 34050, Seattle, WA 98124-1050. The review provisions of chapter 43.21B RCW do not apply to the administration of these fees.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-050, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-050, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-050, filed 2/7/84.]

PART B
BASE FEE

WAC 173-305-110 Fees. (1) The fee imposed is a thirty-five dollar (or as adjusted by WAC 173-305-040) annual fee payable by hazardous waste generators. The fee for the 1990 fee period is due on October 1, 1990, for any hazardous waste generator operating in Washington after March 22, 1990. The fee for the 1991 calendar year, and the 1990 fee period for any hazardous waste generator who began business after October 1, 1990, is due February 28, 1992. The annual fee for calendar year 1992 and each calendar year thereafter is due on July 1 of the next succeeding year.

Table 1
Primary Business Activities of Potential Generators

Soil preparation services: Includes establishments primarily engaged in application of fertilizer, seed bed preparation, and other services for improving the soil for crop planting such as weed control.

Crop protecting services: Includes establishments primarily engaged in performing crop protecting services such as disease, weed, and insect control.

Metal mining: Includes establishments primarily engaged in mining, developing mines, or exploring for metallic minerals. These ores are valued chiefly for the metals contained, to be recovered for use as such or as constituents of alloys, chemicals, pigments, or other products. It also includes mills that crush, grind, wash, dry, sinter, calcine, or leach ore, or perform gravity separation or flotation operations.

General building contractors: Includes general contractors and operative builders primarily engaged in the construction of nonresidential buildings.

Heavy construction, excluding buildings: Includes general contractors primarily engaged in heavy construction other than building, such as highways and streets, bridges, sewers, railroads, irrigation products, flood control products, and marine construction. It also includes special trade contractors primarily engaged in activities of a type that are clearly specialized to that type of heavy construction and are not normally performed on buildings or building-related projects.

Painting: Includes special trade contractors primarily engaged in painting.

Floor laying and other floor work, not elsewhere classified: Includes special trade contractors primarily engaged in the installation of asphalt tile, linoleum, and resilient flooring, in laying, scraping, and finishing parquet and other hardwood flooring.

Beverages: Includes establishments primarily engaged in manufacturing:

- Malt beverages or malt byproducts;
- Wines, brandy, and brandy spirits including the blending of wines;
- Alcoholic liquors by distillation or by mixing liquors and other ingredients;
- Soft drinks and carbonated waters; and
- Flavoring extracts, syrups, powders, and related products.

Textile mill products: Includes establishments primarily engaged in performing any of the following operations:

- Preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage;

• Manufacturing broadwoven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn;

• Dyeing and finishing fiber, yarn, fabrics, and knit apparel;

• Coating, waterproofing, or otherwise treating fabrics;

• The integrated manufacture of knit apparel and other finished articles from yarn; and

• The manufacture of felt goods, lace goods, nonwoven fabrics, and miscellaneous textiles.

Sawmills and planing mills, general: Includes establishments primarily engaged in:

• Sawing rough lumber and timber from logs and bolts, or resawing cants and flitches into lumber, including box lumber and softwood cut stock;

• Planing mills combined with sawmills; and

• Separately operated planing mills that are engaged primarily in producing surfaced lumber and standard workings or patterns of lumber. This industry includes establishments primarily engaged in sawing lath and railroad ties and in producing tobacco hogshead stock, wood chips, and snow fence lath.

Hardwood dimension and flooring mills: Includes establishments primarily engaged in manufacturing:

• Hardwood dimension lumber and workings therefrom;

• Other hardwood dimension, semifabricated or ready for assembly;

• Hardwood flooring; and

• Wood frames for household furniture.

Millwork: Includes establishments primarily engaged in manufacturing fabricated wood millwork, including wood millwork covered with materials such as metal and plastics. Planing mills primarily engaged in producing millwork are included in this industry.

Wood kitchen cabinets: Includes establishments primarily engaged in manufacturing wood kitchen cabinets and wood bathroom vanities, generally for permanent installation.

Hardwood veneer and plywood: Includes establishments primarily engaged in producing commercial hardwood veneer and those primarily engaged in manufacturing commercial plywood or prefinished hardwood plywood. This includes nonwood backed or faced veneer and nonwood faced plywood.

Softwood veneer and plywood: Includes establishments primarily engaged in producing commercial softwood veneer and plywood, from veneer produced in the same establishment or from purchased veneer.

Wood preserving: Includes establishments primarily engaged in treating wood, sawed or planed in other establishments, with creosote or other preservatives to prevent decay and to protect against fire and insects. This industry also includes the cutting, treating, and selling of poles, posts and piling, but establishments primarily engaged in manufacturing other wood products, which they may also treat with preservatives, are not included.

Reconstituted wood products: Includes establishments primarily engaged in manufacturing reconstituted wood products. Important products of this industry are hardboard, particleboard, insulation board, medium density fiberboard, waferboard, and oriented strandboard.

Wood products, not elsewhere classified: Includes establishments primarily engaged in manufacturing wood products, not elsewhere classified, and products from rattan, reed, splint, straw, veneer, veneer strips, wicker, and willow.

Furniture and fixtures: Includes establishments primarily engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures.

Paper and allied products: Includes establishments primarily engaged in the manufacture of:

• Pulps from wood and other cellulose fibers, and from rags;

• Paper and paperboard; and

• Paper and paperboard into converted products, such as paper coated off the paper machine, paper bags, paper boxes, and envelopes.

Also included are establishments primarily engaged in manufacturing bags of plastics film and sheet.

Printing and publishing: Includes establishments primarily engaged in printing by one or more common process, such as letterpress; lithography (including offset), gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding and platemaking. It also includes establishments engaged in publishing newspapers, books, and periodicals.

Chemicals and allied products: Includes establishments primarily engaged in producing basic chemicals, and establishments manufacturing products by predominantly chemical processes.

Petroleum refining and related industries: Includes establishments primarily engaged in petroleum refining, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials.

Rubber and miscellaneous plastic products: Includes establishments primarily engaged in manufacturing products from plastics resins and from natural, synthetic, or reclaimed rubber, gutta percha, balata, or butta siak.

Stone, clay, and glass products: Includes establishments primarily engaged in manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut stone, abrasive and asbestos products, and other products from materials taken principally from the earth in the form of stone, clay, and sand.

Primary metal industries: Includes establishments primarily engaged in:

• Smelting and refining ferrous and nonferrous metals from ore, pig, or scrap;

• Rolling, drawing, and alloying metals;

• Manufacturing castings and other basic metal products; and

• Manufacturing nails, spikes, and insulated wire and cable.

This group includes the production of coke.

Fabricated metal products: Includes establishments primarily engaged in fabricating ferrous and nonferrous metal products, such as:

• Metal cans,
• Tinware,
• Handtools,
• Cutlery,
• General hardware,
• Nonelectric heating apparatus,
• Fabricated structural metal products,
• Metal forgings,
• Metal stampings,
• Ordnance (except vehicles and guided missiles), and
• A variety of metal and wire products not elsewhere classified.

Industrial and commercial machinery and computer equipment: Includes establishments primarily engaged in manufacturing industrial and commercial machinery and equipment and computers.

Electronic and other electrical equipment and components, except computer equipment: Includes establishments primarily engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy. Included is the manufacturing of:

• Electricity distribution equipment;
• Electrical industrial apparatus;
• Household appliances;
• Electrical lighting and wiring equipment;
• Radio and television receiving equipment;
• Communications equipment;
• Electronic components and accessories; and
• Other electrical equipment and supplies.

Transportation equipment: Includes establishments primarily engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, guided missiles, and space vehicles, ships, boats, railroad equipment, and miscellaneous transportation equipment, such as motorcycles, bicycles, and snowmobiles.

Instruments; measuring, analyzing, and controlling photographic, medical, and optical goods; watches and clocks: Includes establishments primarily engaged in manufacturing:

• Instruments (including professional and scientific) for measuring, testing, analyzing, and controlling, and their associated sensors and accessories;
• Optical instruments and lenses;
• Surveying and drafting instruments;
• Hydrological, hydrographic, meteorological, and geophysical equipment;
• Search, detection, navigation, and guidance systems and equipment;
• Surgical, medical, and dental instruments, equipment, and supplies;
• Ophthalmic goods;
• Photographic equipment and supplies; and
• Watches and clocks.

Jewelry, silverware, and plated ware: Includes establishments primarily engaged in manufacturing:

• Jewelry and other articles made of precious metals with or without stones;
• Flatware, hollowware, ecclesiastical ware, trophies, trays, and related products made of:
• Sterling silver;
• Metal plated with silver, gold, or other metal;
• Nickel silver;
• Pewter; or
• Stainless steel.

Toys and sporting goods: Includes establishments primarily engaged in manufacturing: Sporting and athletic goods such as fishing tackle, golf and tennis goods, skis and skiing equipment.

Signs and advertising specialties: Includes establishments primarily engaged in manufacturing electrical, mechanical, cutout, or plate signs and advertising displays, including neon signs, and advertising specialties.

Railroad transportation: Includes establishments furnishing transportation by line-haul railroad, and switching and terminal establishments.

Local and interurban passenger transit: Includes establishments primarily engaged in furnishing local and suburban passenger transportation.

Water transportation: Includes establishments primarily engaged in freight and passenger transportation on the open seas or inland waters, and establishments furnishing incidental services such as lighterage, towing, and canal operation. This major group also includes excursion boats, sightseeing boats, and water taxis.

Transportation by air: Includes establishments primarily engaged in furnishing domestic and foreign transportation by air and also those operating airports and flying fields and furnishing terminal services.

Electric services: Includes establishments primarily engaged in the generation, transmission, or distribution, or a combination thereof, of electric energy for sale.

Combination electric and gas, and other utility services: Includes establishments providing electric or gas services in combination with other services.

Sanitary services: Includes:

• Establishments primarily engaged in the collection and disposal of wastes conducted through a sewer system; and
• Establishments primarily engaged in the collection and disposal of refuse by processing or destruction or in the operation of incinerators, waste treatment plants, landfills, or other sites for disposal of those kinds of materials.

Motor vehicles, parts, and supplies: Includes establishments primarily engaged in the:

- Wholesale distribution of new and used passenger automobiles, trucks, trailers, and other motor vehicles, including motorcycles, motor homes, and snowmobiles;
- Wholesale distribution of motor vehicle supplies, accessories, tools, and equipment except tires and new motor vehicle parts;
- Distribution at wholesale or retail of used motor vehicle parts and those primarily engaged in dismantling motor vehicles for the purpose of selling parts.

Electrical apparatus and equipment, wiring supplies, and construction materials: Includes establishments primarily engaged in the wholesale distribution of:

- Electrical power equipment for the generation, transmission, distribution, or control of electric energy;
- Electrical construction materials for outside power transmission lines and for electrical systems; and
- Electric light fixtures and bulbs.

Machinery, equipment, and supplies: Includes establishments primarily engaged in the:

- Wholesale distribution of construction or mining cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries;
- Distribution of agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden;
- Distribution of dairy and other livestock equipment; and
- Wholesale distribution of industrial machinery and equipment.

Miscellaneous durable goods: Includes establishments primarily engaged in assembling, breaking up, sorting, and wholesale distribution of scrap and waste materials.

Chemicals and allied products: Includes establishments primarily engaged in the wholesale distribution of:

- Plastics materials, and of unsupported plastics film, sheets, sheeting, rods, tubes, and other basic forms and shapes;
- Chemicals and allied products, such as acids, industrial and heavy chemicals, dye stuffs, industrial salts, rosin, and turpentine.

Petroleum and petroleum products: Includes establishments primarily engaged in the wholesale distribution of:

- Crude petroleum and petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities;
- Petroleum and petroleum products, except those with bulk liquid storage facilities.

Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and its products at wholesale, but without bulk liquid storage facilities.

Farm supplies: Includes establishments primarily engaged in the wholesale distribution of fertilizers, agricultural chemicals, and pesticides.

New and used car dealers: Includes establishments primarily engaged in the retail sale of new automobiles or new and used automobiles. These establishments frequently maintain repair departments and carry stocks of replacement parts, tires, batteries, and automotive accessories.

Gasoline service stations: Includes gasoline service stations primarily engaged in selling gasoline and lubricating oils.

Laundry, cleaning, and garment services: Includes establishments primarily engaged in:

- Operating mechanical laundries with steam or other power;
- Linen supply;
- Coin-operated laundries and dry-cleaning;
- Dry-cleaning plants, except rug cleaning;
- Carpet and upholstery cleaning; and
- Industrial launderers.

Establishments that solely operate coin-operated washing machines and dryers and establishments that solely clean carpets or rugs are not included.

Disinfecting and pest control services: Includes establishments primarily engaged in disinfecting dwellings and other buildings, and in termite, insect, rodent, and other pest control, generally in dwellings or other buildings.

Truck rental and leasing, without drivers: Includes establishments primarily engaged in short-term rental or extended-term leasing of trucks, truck tractors, or semitrailers without drivers.

Automotive repair shops: Includes establishments primarily engaged in the:

- Repair of automotive tops, bodies, and interiors, or automotive painting and refinishing;
- Customizing automobiles, trucks, and vans except on a factory basis;
- Installation, repair, or sale and installation of automotive exhaust systems;
- Repairing and retreading of automotive tires;
- Installation, repair, or sales and installation of automotive transmissions;
- General automotive repair;
- Specialized automotive repair, such as fuel service (carburetor repair), brake relining, front end and wheel alignment, and radiator repair.

Miscellaneous repair shops and related services: Includes establishments primarily engaged in:

- General repair work by welding, including automotive welding;
- Rewinding armatures and rebuilding or repairing electric motors;
- Specialized repair services, such as bicycle repair, leather goods repair;
- Lock and gun repair, including the making of lock parts or gun parts to individual order;
- Musical instrument repair;

- Septic tank cleaning;
- Farm machinery repair;
- Furnace cleaning;
- Motorcycle repair;
- Tank truck cleaning;
- Taxidermists;
- Tractor repair; and
- Typewriter repair.

Hospitals: Includes establishments primarily engaged in providing:

- Diagnostic services, extensive medical treatment including surgical services, and other hospital services, as well as continuous nursing services;
- General medical and surgical services and other hospital services;
- Diagnostic medical services and inpatient treatment for the mentally ill;
- Diagnostic services, treatment, and other hospital services for specialized categories of patients, except mental.

Medical laboratories: Includes establishments primarily engaged in providing professional analytic or diagnostic services to the medical profession, or to the patient on prescription of a physician.

Colleges, universities, professional schools, and junior colleges: Colleges, universities, and professional schools furnishing academic courses and granting academic degrees; or junior colleges and technical institutes furnishing academic, or academic and technical, courses, and granting associate academic degrees, certificates, or diplomas.

Research and testing services: Includes establishments primarily engaged in:

- Commercial physical and biological research and development on a contract or fee basis; or
- Performing noncommercial research into and dissemination of, information for public health, education, or general welfare; or
- Providing testing services.

Environmental quality: Government establishments primarily engaged in:

- Regulation, planning, protection and conservation of air and water resources;
- Solid waste management;
- Water and air pollution control and prevention;
- Flood control;
- Drainage development, and consumption of water resources;
- Coordination of these activities at intergovernmental levels;
- Research necessary for air pollution abatement and control and conservation of water resources;
- Government establishments primarily engaged in regulation, supervision and control of land use, including recreational areas;
- Conservation and preservation of natural resources;
- Control of wind and water erosion;
- The administration and protection of publicly and privately owned forest lands, including pest control;
- Planning, management, regulation, and conservation of game, fish, and wildlife populations, including wildlife management areas and field stations; and
- Other matters relating to the protection of fish, game, and wildlife.

Establishments that only provide information and education services to others are not included.

National security: Includes establishments of the armed forces, including the National Guard, primarily engaged in national security and related activities.

(2) A hazardous waste generator must be exempt from the fee imposed under this section if the value of products, gross proceeds of sales, or gross income of the business, from all business activities of the hazardous waste generator, is less than twelve thousand dollars in the current calendar year.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-110, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-110, filed 4/1/91, effective 5/2/91.]

WAC 173-305-120 Responsibilities of the department of ecology. (1) The legislature has provided that the primary responsibilities of the department of ecology are:

(a) To provide a list of hazardous waste generators and to determine the primary business activities of hazardous waste generators.

(b) To collect the fees from hazardous waste generators as identified in (a) of this subsection.

(2) The department of ecology will periodically amend the list of primary business activities of hazardous waste generators by reviewing the most current verified information that is available to the department.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-120, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-120, filed 4/1/91, effective 5/2/91.]

PART C
HAZARDOUS WASTE PLANNING FEE

WAC 173-305-210 Imposition of fee. (1) The fee is imposed on hazardous waste generators and hazardous substance users required to prepare plans under RCW 70.95E.-030. The department may waive the fee for individual facilities when the amount owed is less than the estimated cost of collection. This provision does not waive the requirement to prepare a plan.

(2) The department will determine who, specifically, is required to pay the fee each year and the amount of the fee based on the most current verified information available to the department. Note: Information collected on toxic emissions will not be verified.

(3) The total fees collected under RCW 70.95E.030 may not exceed the department's cost of implementing RCW 70.95C.200.

(4) A person who develops a plan covering more than one interrelated facility as provided for in RCW 70.95C.200 must be assessed fees only for the number of plans prepared. In instances where a person has interrelated facilities without substantially similar processes, a single document may be prepared for the convenience of management but the docu-

ment must contain separate detailed plans for each facility. In these cases, each detailed plan within the document must be assessed a fee.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-210, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-210, filed 4/1/91, effective 5/2/91.]

WAC 173-305-220 Hazardous waste planning fee. (1) The department shall calculate the adjusted fees, annual fee, and maximum total fees using the formula in subsection (3) of this section. The formula uses a risk factor of one for dangerous waste and emissions, and a multiplication factor of ten for extremely hazardous waste. For purposes of this section, hazardous waste reported on the annual dangerous waste generator report as having been either recycled on-site or recycled for beneficial use off-site, including initial amounts of hazardous substances introduced into a process and subsequently recycled for beneficial use, may not be used in the calculation of hazardous waste generated. A facility may petition the director to exclude hazardous wastes recycled for beneficial use even if they were not reported as such on the annual dangerous waste generator report. Documentation from the hazardous waste handling facility that the hazardous waste was recycled for beneficial use must be submitted along with the petition.

(2) Fees in subsection (3) of this section are based on the following definitions:

(Note: The terms "dangerous waste" and "extremely hazardous waste" as used in this subsection use the same basic definition as in WAC 173-305-020, but are modified as follows for the fee calculation only.)

Dangerous waste is the number of pounds of dangerous waste reported that are not recycled for beneficial use, calculated so that wastewater discharged under permit by rule under WAC 173-303-802 is excluded.

Emissions is the number of pounds of emission reported under Toxic Chemical Release Reporting, 40 CFR Part 372, by a company. If emissions are reported in ranges, the middle value of the reported range will be used in the calculation.

Extremely hazardous waste is the number of pounds of extremely hazardous waste reported that are not recycled for beneficial use, calculated so that wastewater discharged under permit by rule under WAC 173-303-802 is excluded.

The price deflator is the *"Implicit price deflator for gross national product* for *government purchases of goods and services for state and local government."*

The total risk pounds for a facility or set of interrelated facilities is equal to ten times the number of pounds of extremely hazardous waste generated, plus the number of pounds of dangerous waste generated, plus the number of pounds of emission reported by that facility.

(3) The annual fee for a facility or set of interrelated facilities is equal to the rate per risk pound times the total risk pounds. The rate for the risk pounds must be calculated by the department so that the maximum total fee in (a) of this subsection can be obtained. The annual fee for each facility or set of interrelated facilities is subject to the limitations in (b) and (c) of this subsection.

(a) The maximum total fees collected must be determined based on the maximum total fee for the previous year, multiplied by the most current price deflator, and divided by the price deflator used in the numerator for the previous year. The price deflator used in the denominator for the first adjustment is the second quarter price deflator for 1990. The maximum total fees for 1990 must be one million dollars.

(b) The maximum fee for any facility or interrelated facility must be determined based on the maximum total fee for the previous year, multiplied by the most current price deflator, and divided by the price deflator used in the numerator for the previous year. The price deflator used in the denominator for the first adjustment is the second quarter price deflator for 1990. The maximum annual fee for 1990 must be ten thousand dollars.

(c) The maximum annual fee for a generator who generates between two thousand six hundred forty and four thousand pounds of dangerous and extremely hazardous waste must be determined based on the maximum total annual fee for the previous year, multiplied by the most current price deflator, and divided by the price deflator used in the numerator for the previous year. The price deflator used in the denominator for the first adjustment is the second quarter price deflator for 1990. The maximum annual fee for 1990 must be fifty dollars.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-220, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-220, filed 4/1/91, effective 5/2/91.]

WAC 173-305-230 Due dates. (1) Fees imposed by RCW 70.95E.030 are first due on July 1, 1991, for facilities that are required to prepare plans in 1992, on July 1, 1992, for facilities that are required to prepare plans in 1993, and on July 1, 1993, for facilities that are required to prepare plans in 1994. Fees for facilities that are required to prepare plans following 1994 are first due on July 1 of the year following the first year that they generate more than two thousand six hundred forty pounds of hazardous waste and/or are required to report under Section 313 of Title III of the Superfund Amendments and Reauthorization Act.

(2) If a facility pays a fee in anticipation of preparing a plan the following year, and circumstances change so that the facility is no longer required to prepare a plan, the facility may request, by letter, a refund of the fee from the department. Upon verification of the information submitted, the department shall grant the refund.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-230, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-230, filed 4/1/91, effective 5/2/91.]

WAC 173-305-240 Responsibilities of the department of ecology. (1) The legislature has provided that the primary responsibility of the department of ecology is to develop, by April 30 of each year, a list of persons subject to the fee and the amount of their fee. The fees must be calculated based on the formulas in WAC 173-305-220(3).

(2) The department of ecology shall collect the fees and subtract any overpayment of the fee in the previous year from the fee for the current year. The department shall also subtract any interest accrued on an overpayment from the fee for the current year if the overpayment was made due to an error

which was the responsibility of the department or an over estimate of rate per risk pound for the prior year.

(3) If there are resubmissions of hazardous waste annual reports or toxic release inventory reports, or both, the department shall add any underpayment of the fee in previous years to the fee for the current year.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-240, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-240, filed 4/1/91, effective 5/2/91.]

Chapter 173-306 WAC
SPECIAL INCINERATOR ASH MANAGEMENT STANDARDS

WAC

WAC 173-306-010 Authority and purpose. This chapter is adopted under the authority of chapter 70.138 RCW, Incinerator ash residue, to protect human health, the environment, and employees during the management and disposal of special incinerator ash. It is also the purpose of this chapter to enhance and encourage the higher waste management priorities as spelled out in chapter 70.138 RCW. This chapter is intended to establish consistent, enforceable management requirements for special incinerator ash that otherwise would be regulated as hazardous waste under chapter 70.105 RCW, the Hazardous Waste Management Act. This chapter is not intended to address ash residues that are classed as hazardous waste under federal rules, 40 CFR Part 261, unless the Environmental Protection Agency decides those wastes are not subject to Subtitle C of the Resource Conservation and Recovery Act.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-010, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-010, filed 4/30/90, effective 5/31/90.]

WAC 173-306-050 Applicability. This chapter applies to municipal solid wastes intended for incineration or energy recovery and special incinerator ash as those terms are defined in WAC 173-306-100. (Incinerator ash whose designation status is unknown must be considered special incinerator ash until data developed under WAC 173-306-500(4) is submitted to the department.) This chapter shall not apply to the following wastes:

(1) Solid waste as defined in WAC 173-306-100 that is not regulated as hazardous waste under chapter 70.105 RCW and that is not intended for incineration or energy recovery;

(2) Hazardous wastes regulated under the Federal Resource Conservation and Recovery Act, 42 U.S.C. sec. 6901 et seq.;

(3) Incinerator ash from the operation of incineration or energy recovery facilities burning only tires, woodwaste, infectious waste, sewage sludge, or any other single type of refuse other than municipal solid waste; and

(4) Incinerator ash from the operation of incineration or energy recovery facilities burning municipal solid waste at a rate of twelve tons of municipal solid waste per day or less.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-050, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-050, filed 4/30/90, effective 5/31/90.]

WAC 173-306-100 Definitions. Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

(1) "Active area" means that portion of a facility where ash disposal operations are being, are proposed to be, or have been conducted. Buffer zones are not considered part of the active area of a facility.

(2) "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.

(3) "Ash" means special incinerator ash.

(4) "Ash cell" or "cell" means an active disposal phase of the site which must be divided into a series of phases to minimize the active ash disposal area.

(5) "Beneficial use" means the water uses as defined by the water resources management program established by the Water Resources Act of 1971 and chapter 173-500 WAC.

(6) "Bottom ash" means ash residues remaining on the incineration or energy recovery facility grates or in the combustion chambers after combustion. Bottom ash may or may not be a special incinerator ash.

(7) "Buffer zone" means that part of a facility which lies between the active area and the property boundary.

(8) "Closure" means those actions taken by the owner or operator of an ash facility to cease disposal operations. A closure notice will be provided to the department with the exact date to ensure that all facilities are closed in conformance with applicable rules at the time of closure and to prepare the site for the post-closure period using best engineering practices.

(9) "Construction quality assurance plan" means a plan describing the methods by which the professional engineer in responsible charge of inspection of the project will determine that the facilities were constructed without significant change from the department approved plans and specifications.

(10) "Contaminate" means 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 173-306-9901;

(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 173-306-9901; or

(c) A statistically significant increase above background in the concentration of a substance which:

(i) Is not specified in WAC 173-306-9901; and

(ii) Is present in the ash; and

(iii) Has been determined to present a substantial risk to human health or the environment in the concentration found at the point of compliance by the department in consultation with the department of health.

(11) "Critical habitat" means habitat defined as critical by the Endangered Species Act of 1973 (P.L. 93-205).

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

(13) "Department's approval" means an approval letter by the director after the review of all engineering reports, plans and specifications, and any other engineering documents by a registered engineer.

(14) "Director" means the director of the department of ecology or the director's designee.

(15) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(16) "Dispose" or "disposal" means the treatment, utilization, processing, or final deposit of special incinerator ash.

(17) "Disposal facility" means all structures, other appurtenances, improvements and land used for recycling, storing, treating, or disposing of special incinerator ash.

(18) "Domestic water" means any water used for human consumption, other domestic activities, livestock watering or for any use for which a water right has been granted.

(19) "Energy recovery" means the recovery of energy in a usable form from mass burning, fluidized bed 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.

(20) "Existing disposal facility" means a disposal facility that is owned or leased and in operation, or for which construction has begun, on or before the effective date of this chapter and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, rules, and ordinances.

(21) "Existing residential development" means any existing development of residential dwelling units with a density of at least one unit per acre and a total of more than ten dwellings at time of permit application.

(22) "Expanded disposal facility" means a disposal facility adjacent to an existing facility for which the land is purchased and approved by the department after the effective date of this chapter. The department shall consider a vertical expansion approved and permitted after the effective date of this chapter to be an expanded disposal facility.

(23) "Fault" means a fracture along which rocks or soils on one side have been displaced with respect to those on the other side.

(24) "Facility" means disposal facility.

(25) "Flyash" or "flyash/scrubber residue" means ash swept from the incineration or energy recovery facility combustion chamber and collected from the boilers, economizers, and air pollution control devices such as scrubbers, baghouses, and electro-static precipitators. Flyash or flyash/scrubber residues may or may not be special incinerator ash.

(26) "Generate" means any act or process that produces special incinerator ash or which first causes special incinerator ash to become subject to regulation.

(27) "Generator" means any incineration facility owner/operator who generates a special incinerator ash. An existing generator is any generator whose facility is in operation on the effective date of this chapter.

(28) "Holocene" means the most recent measure of geologic time period extending from the end of the Pleistocene period to the present.

(29) "Incineration" means reducing the volume of solid wastes by use of an enclosed device that uses controlled flame combustion.

(30) "Independent third party" means, for the purpose of liner construction, a person, approved by the department, with demonstrated experience in successful liner installation or inspection, who is financially and organizationally independent of:

(a) The generator or facility owner/operator;

(b) The raw material producer (such as the resin manufacturer or the bentonite producer);

(c) The liner manufacturer;

(d) The liner installer; or

(e) Any other person who might have a financial or organizational connection to the facility.

(31) "Land treatment" means the practice of applying ash waste onto or incorporating into the soil surface. If the waste will remain after the facility is closed, this practice is disposal.

(32) "Management" means the handling, storage, collection, transportation, and disposal of special incinerator ash.

(33) "Monofill" means a disposal facility or part of a facility, that is not a land treatment facility, at which only special incinerator ash is finally deposited in or on.

(34) "New disposal facility" means a facility that begins operation or construction after the effective date of this chapter.

(35) "One hundred year flood" means a flood that has a one percent chance of being equalled or exceeded in any given year.

(36) "Perennial surface water bodies" are normally continuous bodies of water with natural flows throughout the year and includes lakes, rivers, ponds, irrigation canals, streams, reservoirs, inland waters, salt waters, and all other waters of the state (not to include man-made lagoons or impoundments for waste treatment or storage) within the jurisdiction of the state of Washington as defined by chapter 90.48 RCW, the Water Pollution Control Act.

(37) "Permeability" means the ability with which a porous material allows liquid or gaseous fluids to flow through it.

(38) "Permit" means a special incinerator ash disposal permit.

(39) "Person" means any person, firm, association, county, public, municipal, or private corporation, agency, or other entity whatsoever.

(40) "Pile" means any noncontainerized accumulation of ash that is used for treatment or utilization.

(41) "Plans and specifications" means the detailed drawings and specifications used in the construction or modification of ash disposal facilities.

(42) "Point of compliance" means that part of ground water which lies beneath the perimeter of a disposal facility's active area as that active area would exist at the closure of the facility.

(43) "Post-closure" means the requirements placed upon disposal facilities after closure to ensure their environmental safety for a thirty-year period or until the site becomes stabilized (i.e., cap integrity maintained, little or no settlement or leachate generation).

(44) "Processing" means an operation to convert ash into a useful product or to prepare it for disposal.

(45) "Reclamation" means to process an ash waste in order to recover usable products.

(46) "Utilization" means consuming, expending, exhausting or using an ash waste.

(47) "Sole source aquifer" means an aquifer designated by the Environmental Protection Agency under section 1424e of the Safe Drinking Water Act (P.L. 93-523).

(48) "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 recyclable commodities. This includes all liquid, solid, and semisolid materials that 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, septage from septic tanks, woodwaste, dangerous waste, and problem wastes.

(49) "Special incinerator ash" means ash residues that result from the operation of incineration or energy recovery facilities managing municipal solid waste from residential, commercial, and industrial establishments, if the ash residues (a) would otherwise be regulated as hazardous wastes under chapter 70.105 RCW; and (b) are not regulated as a hazardous waste under the Federal Resource Conservation and Recovery Act, 42 U.S.C. Sec 6901 et seq.

(50) "Spill" means any accidental discharges or overflow of fluids or processed water from contained areas or holding tanks to floor drains or a municipal sewer system.

(51) "Stabilization" or "solidification" means a technique that limits the solubility and mobility of waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes a waste by bonding or chemically reacting with the stabilizing material.

(52) "Storage" means the temporary holding (no longer than forty-five days from date of production) of a limited amount (not to exceed thirty days worth of daily production) of special incinerator ash.

(53) "Subsidence" means a sinking of the land surface due to the removal of solid mineral matter or fluids from the subsurface.

(54) "Surface impoundment" means a facility or part of a facility that 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) 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.

(55) "Treatment" means those engineered physical or chemical processes to make special incinerator ash safer for transport, amenable for energy or material resource recovery, amenable for storage or disposal, or reduced in volume.

(56) "Unstable slopes" means any area where the mass movement of earthen materials i.e., landslides, rockfalls, mudslides, slumps, earth flows, or debris flow is likely to occur.

(57) "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.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-100, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-100, filed 4/30/90, effective 5/31/90.]

WAC 173-306-150 Prohibition of surface impoundments, land treatment and municipal solid waste codisposal of ash. No person may manage any special incinerator ash in a surface impoundment, land treatment facility as defined in WAC 173-306-100, or codispose with municipal solid waste.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-150, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-150, filed 4/30/90, effective 5/31/90.]

WAC 173-306-200 Generator management plans. (1) Applicability. These standards apply to special incinerator ash generators that incinerate more than twelve tons of municipal solid waste per day. Existing generators shall meet the requirements of this section within six months after the effective date of this chapter.

(2) Management plans procedures.

(a) Before generating or managing any special incinerator ash, any generator subject to this section shall submit a generator management plan to the department for review and approval. The department may publish guidelines on the form and content of management plans consistent with this chapter. Within thirty days of receipt, the department shall determine whether the plan is factually complete and so notify the generator.

(b) Upon receipt of a complete generator management plan, the department shall give notice of its receipt of a proposed management plan to the public and to interested persons for public comment for thirty days after the date of publication.

(c) The department shall also perform the following additional public notification requirements:

(i) Mail the notice to persons who have expressed an interest in being notified;

(ii) Mail the notice to other state agencies and local governments with a regulatory interest in the proposal;

(iii) The public notice shall include a statement that any person may express their views in writing to the department within thirty days of the last date of publication;

(iv) Any person submitting written comment or any other person upon request, may obtain a copy of the department's final decision;

(v) The department shall add the name of any person, upon request, to a mailing list to receive copies of notices for all applications within the state or within a geographical area.

(d) The department shall review each generator management plan to determine whether the generator management plan complies with this chapter and chapter 70.138 RCW, including whether the necessary ash disposal permit has been or is likely to be issued.

(e) Within sixty days of receipt of a complete generator management plan, the department may approve, approve with conditions, or reject the submitted generator management plan. Approval may be conditioned upon additional requirements necessary to protect employees, human health, and the environment, including special management requirements such as waste and ash segregation, or treatment techniques such as neutralization, detoxification, and solidification or stabilization.

(f) All generators shall comply with their individual approved management plan. No generator may construct and operate an incineration or energy recovery facility without an approved management plan.

(g) Any generator operating under an approved generator management plan shall notify the department and the department may require resubmission of the generator management plan when there is a proposed material change in the ash management of the special incinerator ash collection and/or handling system.

Upon receipt of the revised generator management plan, the department shall proceed according to subsection (2) of this section.

(3) Generator management plan requirements. Before managing special incinerator ash, all applicable generators shall develop generator management plans. Generator management plans shall show how the following requirements are met:

(a) Planning requirements:

(i) All generators shall demonstrate how the management of ash, including disposal, complies with the city and county comprehensive solid waste management plan of RCW 70.95.080, as applicable.

(ii) All generators shall demonstrate how ash management areas comply with or are a part of the spill prevention plans.

(b) Requirements for managing solid waste to reduce ash toxicity and ash quantity. All generators shall:

(i) Conduct annual municipal solid waste compositional studies to identify kinds and amounts of toxic metals, including cadmium and lead, other hazardous materials, halogenated plastics, and other substances that contribute to the toxicity of special incinerator ash;

(ii) Establish policies, procedures, incentives, and treatment methods to remove toxic metals in municipal solid waste before incineration or energy recovery;

(iii) Establish procedures to insure that dangerous wastes are not knowingly accepted at the incineration or energy recovery facility including developing lists of consumer or commercial items that may or may not be acceptable for incineration;

(iv) Establish a timetable for implementing (b)(i), (ii), and (iii) of this subsection, and a method for evaluating the effectiveness of the program in reducing the toxicity and volume of special incinerator ash.

(c) Collection and handling requirements.

(i) All incineration or energy recovery facilities must be designed and operated to prevent fugitive dust emissions and direct exposure of the ash to the weather. Special incinerator ash must be collected, stored, and handled in enclosed buildings or the equivalent (e.g., covered conveyors and transfer points). This requirement is not applicable to ferrous metal separated from bottom ash.

(ii) Floor or surface drains serving ash collection, storage, and handling areas must not be connected to uncontaminated storm water run-off drains. Spills and process waters must be handled in one or more of the following methods:

(A) Reused in the process;

(B) Discharged to surface waters under a National Pollution Discharge Elimination System Permit issued under chapter 173-220 WAC;

(C) Discharged to surface water, ground water, or a municipal sewer system under a state discharge permit issued under chapter 173-216 WAC;

(D) Injected through wells under an underground injection control permit issued under chapter 173-218 WAC; or

(E) Managed in another method approved by the department.

(iii) All incineration and energy recovery facilities must be designed and operated to comply with chapter 296-62 WAC, the general occupational health standards.

(iv) The percentage of carbon in bottom ash may not exceed six percent by weight, dry, as determined by ASTM D3178-84 or other methods approved by the department. Alternative carbon content limits may be established by the department, upon a demonstration by the owner or operator that methane generation and settlement does not exceed levels associated with bottom ash meeting the six percent carbon standard. Representative samples must be taken according to the guidelines established by the department.

(d) Storage requirements.

(i) Ash must be stored in totally-enclosed buildings, in leak-proof containers, or in tanks;

(ii) Storage may not exceed forty-five days from the date of generation of the ash, and/or the storage amount may not exceed thirty days of daily production;

(iii) Storage must be in an area served by the floor and surface drain requirements in (c)(ii) of this subsection.

(e) Ash from an incineration or energy recovery facility must be transported to an off-site or on-site disposal facility in covered and sealed vehicles or containers to avoid wind dispersal or fluid leakage. Owners and operators shall prevent ash trackout onto the site and the public right-of-way by employing tire washing or any equivalent means. Contaminated washwaters must be disposed of according to (c)(ii) of this subsection.

(f) Waste management accountability. All owners or operators of incineration or energy recovery facilities shall:

(i) Establish procedures acceptable to the department for tracking movements of special incinerator ash from the point of generation and/or handling to the site of final deposit or disposal. The tracking method may include inventory control and tracking systems, scale, ticket, and receipt tracking, gate logs, operating logs, or material balances;

(ii) File a report with the department if the owner or operator has not confirmed that an ash waste has been received at the intended destination within forty-five days of the date the waste was accepted by the transporter. The report must include:

(A) A legible copy of the shipping paper or manifest for which the owner or operator does not have confirmation of delivery; and

(B) A cover letter signed by the generator or his representative explaining the efforts taken to locate the waste and the results of these efforts.

(g) Other state and local requirements. All generators shall comply with all federal, state, and local environmental and industrial hygiene right-to-know laws and rules, including chapter 197-11 WAC, the State Environmental Policy Act rules; chapter 173-304 WAC, the Minimum functional standards for solid waste handling; and chapter 173-434 WAC, the air emission rules for incinerators.

(4) Annual report requirements. All generators shall submit annual reports to the department by March 1 of the following calendar year on forms specified by the department specifying:

(a) Annual amounts, in tons, of:

(i) Municipal solid waste incinerated;

(ii) Bottom ash generated; and

(iii) Flyash/scrubber residue generated.

(b) Disposal sites for all special incinerator ash. For multiple disposal sites, the amounts of disposal that are occurring in tons per year;

(c) Permittee's name, address, telephone number, date of permit issuance and expiration date for the disposal sites listed in (b) of this subsection;

(d) Designation test results. The results of testing bottom ash and flyash/scrubber residues separately and combined flyash and bottom ash on representative samples taken each quarter of the year and subjected to the criteria of WAC 173-303-100. Results of testing bottom ash quarterly for carbon residue according to subsection (3)(c)(iv) of this section must be included unless otherwise approved by the department. After one year of testing, the department may reduce this requirement if a less frequent program can provide adequate data to determine the effectiveness of an ash toxicity reduction program. Representative sampling methods shall follow guidelines specified by the department;

(e) Toxics separation test results. The results of testing bottom ash and flyash separately for toxic metals from samples taken in (d) of this subsection must be included, in order to judge the progress made in toxic metals separation and reduction;

(f) Special test results. The results of testing bottom ash and flyash separately for dioxins and dibenzofurans on a composite sample made from the eight quarterly samples taken in (d) of this subsection must be included; and

(g) Ambient lead and cadmium samples taken in the air and soil respectively at the property boundary must be included to demonstrate compliance with the performance standard of WAC 173-306-440 (2)(b) and (c). The samples must be taken annually for cadmium and quarterly for lead, unless otherwise approved by the department.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-200, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-200, filed 4/30/90, effective 5/31/90.]

WAC 173-306-300 Permit requirements for disposal facilities. (1) Applicability. The permit standards of WAC 173-306-300 through 173-306-330 apply to disposal facilities as defined in WAC 173-306-100. These standards do not apply to generators of special incinerator ash who only handle, store and collect ash on-site and transport ash off-site, nor to facilities specifically excluded under WAC 173-306-400 through 173-306-490.

(2) No disposal facility may be established, constructed, altered, expanded, or closed, until the owner or operator has obtained a permit issued under this chapter or a modified permit issued under WAC 173-306-310(3).

(3) Effective dates for permit requirements. The permit requirements of this section apply to all applicable existing, new or expanding disposal facilities within six months after the effective date of this chapter.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-300, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-300, filed 4/30/90, effective 5/31/90.]

WAC 173-306-310 Permit procedures. (1) Application procedures.

(a) Persons owning or operating new or expanded ash disposal facilities shall apply to the department for a permit, before accepting any special incinerator ash for disposal. These procedures apply to permit renewal. Monofill owners who have successfully complied with the requirements for Type B design in WAC 173-306-450 (4)(a)(i) during the eighteen-month demonstration period shall apply for a permit before using the Design B liner. Applicants shall file two copies of the application with the department that have:

(i) Been signed and notarized as correct by the owner and operator; and

(ii) Attached evidence of compliance with the requirements of chapter 197-11 WAC, the State Environmental Policy Act rules.

(b) Permit applications must contain the information set forth in WAC 173-306-330 in order to be considered complete. Upon receipt of a permit application, the department shall review the application for completeness and notify the permit applicant accordingly.

(c) Within thirty days of receipt of a complete application, the department shall give notice of its receipt of a proposed complete permit application to the public and to interested persons for public comment for thirty days after the date of publication.

(d) The department will perform the following additional public notification requirements:

(i) Mail the notice to persons who have expressed an interest in being notified;

(ii) Mail the notice to other state agencies and local governments with a regulatory interest in the proposal;

(iii) The public notice shall include a statement that any person may express his or her views in writing to the department within thirty days of the last date of publication;

(iv) Any person submitting written comment or any other person, upon request, may obtain a copy of the department's final decision; and

(v) The department shall add the name of any person, upon request, to a mailing list to receive copies of notices for all applications within the state or within a geographical area.

(2) Issuance procedures.

(a) The department shall review each completed application to determine:

(i) Whether the disposal facility meets the requirements of this chapter;

(ii) Whether the disposal facility has been adequately addressed in the city and county comprehensive solid waste management plan as applicable; and

(iii) Whether the disposal facility complies with other environmental laws and rules.

(b) The department may approve, deny, or conditionally approve a completed permit application within sixty days of receipt of the department's notice.

(c) The department may issue up to five-year term permits for ash disposal; applications for reissuance of permits must be made at least six months before permit expiration. The applicant and the department shall follow the procedures of WAC 173-306-310 (1) and (2) in applying for and reissuing permits.

(3) Modification and revocation procedures. When the department obtains any information justifying modification, or the applicant applies for modification of an existing permit, the department may modify or revoke and reissue the permit according to the procedures of this section. An updated application may be requested 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 is reissued for a new term.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-310, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-310, filed 4/30/90, effective 5/31/90.]

WAC 173-306-320 Demonstration and class-use permits. (1) Demonstration permits. Demonstration permits must be required for persons utilizing ash (see WAC 173-306-490 (2)(b)). In addition, persons applying for a utilization permit must demonstrate that the proposed utilization will successfully meet the requirements of WAC 173-306-490 (2)(b)(ii) before full scale reuse or utilization is practiced.

(a) The demonstration permit will be issued in accordance with the procedures of WAC 173-306-310;

(b) The demonstration permit shall address those requirements necessary to meet the standards of WAC 173-306-490 (2)(b)(ii) and (iii), and show that a disposal facility meeting the requirements of this chapter is available in case the demonstration fails or this permit is revoked;

(c) The demonstration permit shall provide a specific time period and a limit on the quantity of ash that will be used for the demonstration; the department may extend the demonstration period as a modification of the demonstration permit;

(d) Unless otherwise approved by the department, the permittee shall submit a report to the department within ninety days of the end of the demonstration. The report shall contain the results of all field tests and laboratory analyses and all data developed during the demonstration period. The department shall then use the information to determine whether or not there is adequate information to issue a class-use permit that will incorporate conditions sufficient to provide compliance with all requirements of WAC 173-306-490 (2)(b)(ii) and (iii). If the information is adequate, the department will issue a class-use permit under the provisions of this section. If the information is inadequate, the department may, as the situation warrants, either issue a modification to the demonstration permit in accordance with the procedures of WAC 173-306-310(3) and this subsection, or deny the class-use permit application.

(2) Class-use permits. Class-use permits are required for persons who distribute utilized ash on the land in a manner that constitutes disposal. The permit is issued to the seller or distributor of utilized ash or ash products to a class of users.

(a) The class-use permit will be issued in accordance with the procedures of WAC 173-306-310;

(b) The class-use permit shall contain those requirements necessary to meet the standards of WAC 173-306-490 (2)(b), including reporting requirements; and

(c) The department will place limitations on the class of users of utilized ash or ash products if it is shown that the limits are necessary to protect human health and the environment.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-320, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-320, filed 4/30/90, effective 5/31/90.]

WAC 173-306-330 Application contents for permits. (1) Application contents for permits for new or expanded facilities.

(a) All permit applications shall contain the following:

(i) A general description of the facility;

(ii) The types of ash to be handled at the facility;

(iii) The plan of operation required by WAC 173-306-405(3) (except for demonstration and class-use permits, WAC 173-306-320);

(iv) The operating log required by WAC 173-306-405(4) (except for demonstration and class-use permits, WAC 173-306-320);

(v) The inspection schedule and inspection log required by WAC 173-306-405.

(b) Application contents for monofill facilities. In addition to the requirements of (a) of this subsection, each monofill application for a permit must contain:

(i) A hydrogeological assessment of the facility that addresses:

(A) Local/regional geology and hydrology, including holocene faults within two hundred feet of the active area and three thousand feet of all other faults, unstable slopes, and

subsidence areas on site; or a department approved geologic hazard assessment study;

(B) Evaluation of bedrock and soil types and properties;

(C) Depths to ground water or aquifer(s), or both;

(D) Direction and flow rate of the uppermost aquifer;

(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 and surface water quality assessment, and for expanded facilities, identification of impacts to date of applicant's existing facilities upon ground and surface waters from monofill 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;

(M) Topography of the site and surrounding areas; and

(N) Drainage pattern of the site and surrounding areas.

(ii) Preliminary engineering report/plans and specifications that address:

(A) How the facility will meet the siting standards of WAC 173-306-350;

(B) Relationship of facility to city and county solid waste comprehensive plan as applicable and the basis for calculating the facility's life;

(C) The design of bottom and side liners;

(D) Identification of materials for daily cover and borrow sources for final cover and soil liners;

(E) Interim/final leachate collection, treatment, and disposal;

(F) Leachate detection where applicable;

(G) Fugitive dust controls;

(H) Trench design, fill methods, elevation of final cover and bottom liner, and equipment requirements;

(I) The run-on and run-off system;

(J) The design to avoid washout;

(K) Filling phases, interim cover and final cap elevation; interim cover should be minimized depending on site specific topography and projected filling phases;

(L) Closure/post-closure design, construction, maintenance, and land use;

(M) Signs, fencing, and road paving; and

(N) Scales, employee amenities, communication, and unloading areas.

(iii) An operation plan that addresses:

(A) Operation and maintenance of leachate collection, treatment, and disposal systems;

(B) Operation and maintenance of fugitive dust controls;

(C) Monitoring plans for ground water, surface water, soils and ambient air to include sampling technique, frequency, handling, and analysis requirements;

(D) Safety and emergency accident/fire plans;

(E) Routine filling, grading, cover, and housekeeping; and

(F) Record system to address records on weights (or volumes), number of vehicles, and the types of waste received.

(iv) A closure plan that addresses:

(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;

(F) Items required in WAC 173-306-410(3); and

(G) Identification of final closure cost including cost calculations and funding mechanisms.

(v) A post-closure plan that addresses:

(A) Estimated time period for post-closure activities;

(B) Site monitoring of ash monofill, soil, air, ground water, and surface water;

(C) Deed clause changes, land use, and zoning restrictions;

(D) Maintenance activities to maintain cover and run-off systems;

(E) Items required in WAC 173-306-410(6);

(F) Identification of post-closure costs including cost calculations and funding mechanisms; and

(vi) Other information as required by the department.

(c) Application contents for treatment (including solidification and stabilization) standards. In addition to the requirements of (a) of this subsection, each application for a treatment permit must contain:

(i) Preliminary engineering reports/plans and specifications that address:

(A) The chemical and physical principle(s) upon which the treatment is based, including laboratory, pilot plant, prototype, or full-scale data with sufficient detail to assure the department that the treatment process is feasible and to allow the department to specify capacity and operating conditions;

(B) Tank, reaction vessel, furnace, total-enclosed treatment facility and container designs and the basis for selecting the materials of construction and the thickness of the treatment device (such as corrosion data) or protective lining;

(C) Fugitive dust controls, including conveyor, transport, unloading, and building design;

(D) Instrumentation and process control design to assure operating within conditions specified in the permit;

(E) Warning signs and occupational health and safety engineering controls;

(F) Monitoring equipment; and

(G) Other factors as required by the department.

(ii) An operation plan that addresses:

(A) Operation and maintenance of the treatment device;

(B) Operation and maintenance of fugitive dust controls;

(C) Monitoring as required in WAC 173-306-500 and the department on a case-by-case basis; and

(D) Safety, occupational health, and emergency accident/fire plans.

(iii) A closure plan that addresses:

(A) Estimate of closure year and cost;

(B) Methods of removing wastes and cleaning or decontaminating reaction devices and final disposal of both;

(C) Closure timing and notification procedures;

(D) Final inspection by regulatory agencies;

(E) Items required in WAC 173-306-410(3); and

(iv) Other information as required by the department.

(d) Application contents for utilization facilities. In addition to the requirements of (a) of this subsection, each application for utilization must contain:

(i) For accumulation before utilization facilities:

(A) The method of calculating the percent of ash being reused within a calendar year; and

(B) Compliance with the generator management plan storage requirements of WAC 173-306-200 (3)(d)(i) and (ii) if accumulation is by the generator; or

(C) Compliance with the monofill facility standards of WAC 173-306-440 if accumulation is by a disposal facility.

(ii) For reuse constituting disposal facilities:

(A) Information supplied by the applicant pertaining to the factors of WAC 173-306-490 (2)(b)(iii); and

(B) Other information as required by the department.

(2) Application contents for permits for existing facilities. Owners or operators of existing facilities applying for a permit to comply with the requirements of WAC 173-306-310 shall include:

(a) The information required in subsection (1)(a) of this section; and

(b) Other information as required by the department.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-330, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-330, filed 4/30/90, effective 5/31/90.]

WAC 173-306-340 Engineering reports, plans and specifications required in permits. (1) Before constructing or modifying disposal facilities, final engineering reports, plans and specifications must be submitted to and approved by the department according to a compliance schedule specified in the permit. The engineering report for a disposal facility must be sufficiently final so that plans and specifications can be developed from it without substantial changes.

(2) All final engineering reports, plans and specifications should be submitted by the owner or operator consistent with the compliance schedule in the permit and at least thirty days before the time approval is needed. The department will review and comment on and may approve (or conditionally approve) or disapprove the plans and reports within the thirty-day period unless circumstances prevent, in which case the owner or operator will be notified and informed of the reason for the delay.

(3) The final engineering report may be submitted before or concurrently with the final plans and specifications.

(4) The department will review the documents to ascertain that the proposed facility will be:

(a) Designed, constructed, operated, maintained, and closed to meet the requirements of the permit issued under this chapter; and

(b) Consistent with good engineering practices.

(5) Within thirty days after acceptance by the owner or operator of or modification to an ash disposal facility, a professional engineer in responsible charge of inspection of the project shall submit to the department one complete set of record drawings or as-builts, and 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.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-340, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-340, filed 4/30/90, effective 5/31/90.]

WAC 173-306-345 Construction quality assurance plan. (1) Before construction or modification, a detailed plan that shows how adequate and competent construction inspection will be provided to insure compliance with the requirements of this chapter and the approved engineering documents must be submitted to and approved by the department. The plan must be submitted according to a schedule specified in the permit.

(2) The construction quality assurance plan shall include:

(a) A construction schedule summarizing planned construction activities, noting sequence interrelationships, durations, and terminations;

(b) A description of construction management, organization management procedures, lines of communication, and responsibility;

(c) A description of anticipated quality control testing, including type of test, frequency, and who will perform the tests;

(d) A description of the construction inspection program including inspection responsibilities, anticipated inspection frequency, deficiency resolution, and inspector qualifications; and

(e) For monofills, a description of how WAC 173-306-440 (4)(d) is to be met.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-345, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-345, filed 4/30/90, effective 5/31/90.]

WAC 173-306-350 Incinerator ash siting standards for disposal facilities. (1) Applicability. These standards apply to all new or expanded monofills. These standards do not apply to:

(a) Existing monofills or monofills that have closed before the effective date of this chapter; or

(b) Treatment, utilization, or processing facilities.

(2) Siting standards.

Owners or operators of all applicable disposal facilities shall, at the time of permit application, meet the following locational standards:

(a) Geology. No facility may be located within two hundred feet, measured horizontally, from a fault that has had displacement in holocene times. All faults within three thousand feet of a facility must be identified and evaluated under WAC 173-306-330(1), where existing geologic information is available or can be obtained with reasonable effort. For sites for which fault information cannot reasonably be obtained, a geologic hazard assessment performed by an experienced, qualified geologist may be substituted for this

siting criteria, if the study methods are reviewed and approved by the department before the investigation.

(b) Ground water.

(i) No facility may be located where the depth from the lowest point of the bottom liner to the seasonal high water level of the upper most aquifer of beneficial use is less than ten feet or 120 days travel time hydraulically, whichever is greater.

(ii) No facility may be located over a sole source aquifer.

(iii) No facility's active area may be located closer than one thousand feet to the nearest downgradient ground water intake for domestic water in use and existing at the time of permit application unless the owner or operator can show that the active area is no less than one hundred twenty days travel time hydraulically to the nearest downgradient ground water intake for domestic water.

(c) Natural soils. No facility may be located:

(i) Where known subsidence exists within the facility boundary;

(ii) In an area where unstable slopes may impact the active area of the facility;

(iii) Where weak or unstable soils exist within the proposed facility boundary, unless the structural stability of the soils is mitigated through engineering practices. (The following soils or conditions are defined as weak or unstable: Organic soils, expansive soils, liquefaction sands, soft clays, sensitive clays, loess and quick conditions.)

(d) Flooding. No facility's active area may be located within the one hundred-year flood elevation as indicated in the most current Federal Emergency Management Agency maps.

(e) Surface water. No facility's active area may be located within five hundred feet, measured horizontally, of the ordinary high water mark of any perennial surface water body.

(f) Sensitive areas. No facility may be located:

(i) In an area that would result in the taking of species or the direct elimination of critical habitat for federal or state listed threatened or endangered species;

(ii) In a wetland as defined by the United State Fish and Wildlife Service (Cowardin et al. 1979);

(iii) In a shoreline of the state under the jurisdiction of the Shoreline Management Act;

(iv) In an area classified as a wilderness area as defined by the Wilderness Act of 1964 (P.L. 88-577);

(v) In a state or federally designated wildlife refuge or a game farm;

(vi) In an area with city, county, state, or federal designation as a park or recreation area or any area provided for under chapter 79.70 RCW, natural area preserves; and

(vii) In an area with city, county, state, or federal designation as an archaeological or historic area or a national monument.

(g) Land use. No facility may be located so that its active area is closer than two hundred feet to the facility property line. The active area may be no closer than one thousand feet to the nearest housing unit in an existing residential development. The one thousand-foot rule may be evaluated on a case-by-case basis in rural areas and unincorporated towns.

(h) Climatic factors. No facility may be located in an area that has a history of severe climatic factors without engineered protection to mitigate those factors. Severe climatic factors, include but are not limited to, high annual rainfall, extreme temperatures (high or low), and high winds.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-350, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-350, filed 4/30/90, effective 5/31/90.]

WAC 173-306-400 Ash disposal facility standards. (1) Applicability. The standards of WAC 173-306-405 through 173-306-470 are the ash disposal standards and apply to all disposal facilities except ash disposal facilities that are engaged in closure or were closed before the effective date of this chapter.

(2) Standards for permits. The standards of WAC 173-306-405 through 173-306-470 must be used as the basis for permitting as required in WAC 173-306-300.

(3) Effective dates.

(a) All existing ash disposal facilities not in conformance with these standards must be placed on compliance schedules as part of the permit issued in WAC 173-306-300. Full compliance must be met within three years of the effective date of this chapter. However, the following facility standards must be met within eighteen months of the effective date of this chapter:

(i) The general facility standards of WAC 173-306-405;

(ii) The operating and maintenance standards of WAC 173-306-440(5); and

(iii) The monitoring requirements of WAC 173-306-500.

(b) All new and expanded facilities shall meet the ash disposal facility standards of WAC 173-306-405 to 173-306-470 after the effective date of this chapter.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-400, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-400, filed 4/30/90, effective 5/31/90.]

WAC 173-306-405 General facility operational standards. (1) Applicability. All special incinerator ash disposal facilities shall meet the requirements of this section.

(2) Imminent hazard. Notwithstanding any provisions of this chapter, enforcement actions may be brought in the event that the management practices of an ash disposal facility present an imminent and substantial hazard to the health of employees, the public health or the environment.

(3) Plan of operation. Each owner or operator shall develop and use the plan of operation required during the permitting process in WAC 173-306-300. The plan shall describe the facility's operation and convey to the operating personnel the concept of operation intended by the designer. The facility must be operated in accordance with the plan. Modifications to the plan must be approved by the department. The plan of operation must be available for inspection at the request of the department. Each plan of operation shall include:

(a) Ash management during the facility's active life;

(b) Frequency and methods of inspections and monitoring;

(c) Employee safety and training that addresses:

(i) Protection from exposure and contact with ash;

(ii) Employee training;

(iii) Medical monitoring; and

(iv) A safety plan or procedure;

(d) Actions to take for mitigating any sudden release of ash to surface water or dispersal by wind;

(e) Modifications to the plan permit, or plan of operation, or both, in the event of ground water contamination;

(f) Equipment maintenance, particularly for leachate collection and treatment; and

(g) Other details as required by the department.

(4) Recordkeeping. The facility owner or operator shall keep a written operating record at the facility that must be furnished upon request and made available at all reasonable times, to any employee of the department.

(a) The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(i) The type and quantity of each ash shipment received or managed on-site and the methods and dates of management at the facility;

(ii) Records and inspection results as required by subsections (5) and (6) of this section;

(iii) Monitoring, testing, or analytical data where required by WAC 173-306-500;

(iv) All closure and, for final deposit, post-closure cost estimates required for the disposal facility; and

(v) Deviations from the plan of operation specified in subsection (3) of this section.

(b) The retention period for all facility records required under this chapter is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the department.

(5) Reporting. Each owner or operator shall prepare and submit a copy of the annual report to the department by March 1 of the following year. The annual report shall cover facility activities during the previous year and must include the following information:

(a) The name and address of the disposal facility;

(b) The calendar year covered by the report;

(c) Annual quantity in tons and the type of ash accepted by the disposal facility and the method of management;

(d) Results of soil, air quality, and ground water monitoring required in WAC 173-306-440;

(e) The most recent closure cost estimate and, for final deposit monofills, post-closure cost estimates under WAC 173-306-410; and

(f) Other information required by the department.

(6) Inspections. The owner or operator shall inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of ash 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 a minimum, the date and time of inspection, the printed name and the hand-written 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 must be made available to the department upon request.

(7) Other state and local requirements. All owners or operators of ash disposal facilities shall comply with all state and local laws and rules such as zoning, land use, fire protection, industrial safety and hygiene, water pollution, air pollution, nuisance and aesthetics.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-405, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-405, filed 4/30/90, effective 5/31/90.]

WAC 173-306-410 General closure and post-closure requirements. (1) Applicability. The closure requirements of subsections (2), (3), and (4) of this section apply to all disposal facilities. The post-closure requirements of subsections (5), (6), and (7) apply to monofills subject to WAC 173-306-440.

(2) Closure performance requirements. Each owner and operator shall close the 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 ash constituents, leachate, monofill gases, contaminated rainfall or ash decomposition products to the ground or soil, ground water, surface water, and the atmosphere; and

(c) Prepares the facility for the post-closure period.

(3) Closure plan and amendment. Closure as defined in WAC 173-306-100 includes, but is not limited to, grading, seeding, landscaping, contouring and screening.

(a) Each owner or operator shall develop and use a plan of closure approved by the department as part of the permitting process of WAC 173-306-310.

(b) The closure plan shall project time intervals at which closure activities must be implemented, and shall identify estimated closure costs and project fund withdrawal intervals from the approved financial assurance instrument, where applicable.

(c) No owner or operator may begin disposal operations in any part of a facility until a closure plan for the entire facility has been approved by the department, and until a financial assurance instrument has been provided, as required by WAC 173-306-470.

(d) The department may determine at its discretion and for cause that a facility closure plan is invalid and may require an owner or operator to:

(i) Amend the facility closure plan and obtain the department's written approval; and/or

(ii) Cease facility operation or closure activities in whole or in part until an approved closure plan is obtained.

(e) Each owner or operator shall close the facility in accordance with the approved closure plan and all approved amendments.

(4) Closure procedures.

(a) Each owner or operator shall notify the department and, where applicable, the financial assurance instrument trustee, of the intent to implement the closure plan in whole or in part, no later than one hundred eighty days before the projected final receipt of waste at part of or at the entire facility.

(b) The owner or operator shall begin implementing the closure plan in part or whole within thirty days after receipt of a final volume of ash and/or attaining the final monofill elevation at part of or at the entire facility as identified in the approved facility closure plan.

(c) Ash may not be accepted for use in closure except as identified in the closure plan approved by the department, as required in subsection (3)(a) of this section.

(d) When facility closure is completed in part or whole, each owner or operator shall submit to the department:

(i) Facility closure plan sheets signed by a professional engineer registered in the state of Washington. The plan shall reflect all as-built changes to final closure construction as approved in the closure plan; and

(ii) An affidavit signed 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) Maps and a statement of fact concerning the location of the final ash disposal must be recorded as part of the deed with the county auditor not later than three months after closure. Records and plans specifying ash amounts, locations and periods of operation must be submitted to the local zoning authority or the authority with jurisdiction over land use and must be made available for inspection.

(f) When the department finds the facility has been closed in accordance with the specifications of the approved closure plan and the closure requirements of this section, the department shall:

(i) Issue a certificate of closure for the site to the owner or operator and the department; and

(ii) Notify the owner or operator and the department that the facility post-closure period has begun in whole or in part on a specified date.

(5) Post-closure performance standard. Monofill owners or operators shall perform post-closure activities as needed to protect human health and the environment.

(6) Post-closure plan and amendment. Post-closure includes monitoring of ground water, surface water, and air quality; maintenance of the facility, facility structures, and monitoring systems; and other activities deemed appropriate by the department.

(a) The owner or operator shall develop and use a post-closure plan approved as a part of the permitting process in WAC 173-306-310. The post-closure plan shall address facility maintenance and monitoring activities for a thirty-year period.

(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) No owner or operator may begin disposal operations in any part of a facility until a post-closure plan for the entire facility has been approved by the department, and until a financial assurance instrument has been provided, where applicable, as required by WAC 173-306-470. Facility post-closure activities must be completed in accordance with the approved post-closure plan or the plan must be so amended with the approval of the department.

(d) The department may determine, at its discretion and for cause, that a facility post-closure plan is invalid and may require an owner or operator to:

(i) Amend the facility post-closure plan and obtain the department's written approval; and/or

(ii) Cease facility operation or closure activities in part or wholly until an approved post-closure plan is obtained.

(7) Post-closure procedures.

(a) Each owner or operator shall begin post-closure activities after completing closure activities outlined in subsection (4)(d)(i) and (ii) of this section. The department may direct that post-closure activities cease until the owner or operator has received the department's certification of closure and a notice to proceed with post-closure activities.

(b) When post-closure activities are complete, the owner or operator shall submit an affidavit to the 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.

(c) If the department finds that post-closure activities have stabilized the facility, the department may, at its discretion, authorize the owner or operator to gradually reduce or discontinue post-closure maintenance and monitoring activities. The department shall certify the end of the post-closure care period by issuing a certificate of post-closure completion to the facility owner or operator.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-410, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-410, filed 4/30/90, effective 5/31/90.]

WAC 173-306-440 Ash monofill facility standards. (1) Applicability. This section applies to owners and operators of facilities that monofill special incinerator ash, except as WAC 173-306-400 provides otherwise.

(2) Minimum standards for performance.

(a) Ground water. Monofill owners or operators may not contaminate underlying ground water beyond the point of compliance. Contamination and point of compliance are defined in WAC 173-306-100.

(b) Soil. Soils at the property boundary may not exceed the following limits for cadmium due to the facility operations based upon annual samples:

(i) The annual increase in cadmium loading in the upper six inches of soil with a pH equal to or greater than 6.5 may not exceed 0.5 kilograms per hectacre annually or a total accumulation of 20 kilograms per hectacre; and

(ii) The annual increase in cadmium loading in the upper six inches of soil with a pH less than 6.5 may not exceed a total accumulation of 5.0 kilograms per hectacre.

(c) Air quality. Monofill owners or operators may not cause a violation of an emission standard from any emission of particulates, dusts or gases associated with the operation and/or closure/post-closure of the landfill nor any ambient air quality standard at the property boundary including the following ambient lead standard:

The level of lead and its compounds measured as elemental lead in suspended particulate matter measured during a twenty-four hour sample taken at the downwind facility boundary may not exceed 1.5 micrograms per cubic meter of air due to the facility's operation or the latest national ambient

air quality standards. The sampling frequency will be monthly unless otherwise approved by the department.

(d) Surface waters. Monofill owners or operators may 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 monofill.

(3) Siting standards. Monofill owners or operators receiving special incinerator ash shall comply with incinerator ash siting standards of WAC 173-306-350(2).

(4) Minimum design standards.

(a) Minimizing liquids. Monofill owners or operators shall minimize liquids admitted to active areas by:

(i) Covering according to subsection (5)(e) of this section.

(ii) Disposing of no ash containing free liquids unless approved by the department;

(iii) Designing, constructing, and maintaining run-off controls to restrict the chance of a run-off event from releasing contaminated run-off waters to an annual probability of one percent or less (one hundred-year event or greater). In meeting this requirement the following items are to be considered:

(A) The design of the containment structures should be selected based on the ability of the facility to store, test, and/or treat the run-off during a twenty-four hour or longer storm event.

(B) The design assumes that the storm event occurs during the final year of the active life of the monofill or at a time when the facility is most vulnerable to a storm that could produce the release of contaminated waters. The method of placement of the ash should be considered when determining the volume available for storage of run-off.

(C) A minimum of one foot of freeboard (measured from the invert of the emergency spillway) should be maintained following the occurrence of the design storm.

(D) An emergency spillway is to be constructed for the containment structure to provide controlled release of excess run-off waters in the case where the design storm is exceeded.

(iv) Design, construct, and maintain diversion channels, channel containment berms, culverts, pipes, and other drainage control features to pass and/or store run-on to restrict the chance of failure of the drainage control features to an annual probability of one percent or less (one hundred-year event or greater). In meeting this requirement the following items are to be considered:

(A) For those cases where the run-on waters are to be stored and/or treated, selection of the storm design should be based on the appropriate procedures governing run-off controls.

(B) For those cases where the run-on waters are to be diverted around the facility, the drainage control features should be sized to pass the run-on peak discharge (design flood) of a magnitude that has an annual exceedance probability of one percent or less (one hundred-year flood peak discharge or greater).

(C) Sufficient erosion protection and freeboard (one foot minimum) are to be provided for all drainage control features to preclude failure of those features during passage of the design flood.

(v) Submit engineering plans and specifications for any containment barrier equalling or exceeding as storage capacity of ten acre-feet to the department's dam safety section for review under RCW 90.03.350.

(b) Leachate systems. Monofill owners or operators shall:

(i) Install a department-approved leachate collection system sized according to water balance calculations or using other accepted engineering methods;

(ii) Install a leachate collection system to prevent no more than one foot of leachate developing at the topographical low point of the active area; and

(iii) Install a leachate treatment system to meet requirements of WAC 173-306-200 (3)(c)(ii)(B) through (E).

(c) Liner and final cap design. Ash monofill owners or operators shall comply with the requirements of WAC 173-306-450.

(d) Liner construction and inspection. Ash monofill owners or operators shall:

(i) Comply with the requirements of WAC 173-306-450.

(ii) Employ an independent third party as defined in WAC 173-306-100 to inspect the liners during construction and installation for uniformity, damage and imperfections (e.g., holes, cracks, thin spots, foreign materials) and quality of construction; and immediately after construction and installations to inspect:

(A) Synthetic liners and covers for tight seams and joints and the absence of tears, punctures or blisters; and

(B) Soil-based and admixed liners and covers for imperfections (e.g., lenses, cracks, channels, root holes) or structural nonuniformities that may affect liner permeability.

(e) Filling requirements for ash cells. Monofill owners or operators shall design and fill ash monofills in phases or cells, as defined in WAC 173-306-100. Only one cell may be open and in use at one time; each cell must be graded and covered with a flexible high density polyethylene liner or other material of equivalent mechanical strength and chemical resistance during the interim period before reaching final elevation. The liner must be 60 mils and have the ability to withstand weather conditions. The owner or operator shall provide, as part of the interim cover, a method of detecting and/or monitoring/inspecting the integrity and any possible failure of the interim cover.

(f) Fugitive dust controls. Monofill owners and operators shall:

(i) Employ tire washing for all ash-carrying vehicles as they leave the site or any equivalent method to prevent the trackout of ash onto the site and the public right of way. Contaminated wash-waters must be disposed of according to WAC 173-306-200 (3)(c);

(ii) Orient the major axis of the active area of the monofill with respect to the prevailing wind directions so as to minimize the effect of wind upon dispersion of special incinerator ash unless engineering designs can provide equivalent protection; and

(iii) Provide for paved approach and exit roads outside the active area with traffic separation and traffic control onsite and at the site entrance.

(g) Other design requirements. Monofill owners and operators shall:

(i) Post signs at each entrance to the active portion and at other locations, in sufficient numbers to be seen from any approach to the active portion. Signs must bear the legend "Danger - unauthorized personnel keep out" or an equivalent legend, and must be legible from a distance of twenty-five feet;

(ii) Have either:

(A) A twenty-four-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility; or

(B) An artificial or natural barrier; or

(C) A combination of both, which completely surrounds the active portion of the facility, with a means to control access through gates or other entrances to the active portion of the facility at all times.

(iii) Provide for monitoring according to WAC 173-306-500 using a design approved by the department;

(iv) Weigh all incoming ash on scales or provide an equivalent method of measuring ash tonnage;

(v) Provide for employee facilities including shelter, toilets, handwashing facilities, and potable drinking water;

(vi) Provide for unloading areas to be as small as possible, consistent with traffic patterns and safe operation; and

(vii) Provide communication (such as telephones) between employees working at the monofill and on-site or off-site management offices to handle emergencies.

(5) Standards for operation and maintenance. All owners and operators shall:

(a) Prohibit the co-disposal of any other solid or hazardous waste in a special incinerator ash landfill;

(b) Comply with the requirements of the general operation standards, WAC 173-306-405;

(c) Control fugitive dust by wetting, by the use of dust suppressing substances, covering, compacting, or otherwise managing the active area of the monofill to control wind dispersal and prevent visible emissions of windblown dust. Road dust on unpaved roads must also be similarly controlled.

(d) Clearly mark the active area boundaries authorized in the permit, with permanent posts or using an equivalent method clearly visible for inspection purposes.

(e) Compact and cover ash daily before adding successive layers according to the requirements of WAC 173-306-450.

(f) Maintain the monitoring systems required in subsection (4)(g)(iii) of this section;

(g) Inspect the monofill weekly while it is in operation and after major storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of run-on and run-off control systems and interim cover;

(ii) The presence of liquids in leak detection systems, where installed, to comply with subsection (4)(b) of this section. The department must be notified of any leaks into the leak detection system within seven days after detecting the leak and immediately remove any accumulated liquid. Notification shall include a schedule for determining the cause of the leak and any remedial measures or increased ground water monitoring to assure that the performance standards of subsection (2)(a) of this section are met;

(iii) The presence of leachate in, and proper functioning of, leachate collection and removal systems; and

(iv) Proper functioning of engineered wind dispersal control systems.

(h) Record the inspections in the log as required in WAC 173-306-405(6).

(6) Closure and post-closure requirements.

(a) At final closure of the monofill or upon closure of any cell, the owner or operator shall cover the monofill or cell with a final cover designed and constructed according to subsection (4)(d) of this section and shall comply with all closure requirements of WAC 173-306-410;

(b) After final closure, the owner or operator must comply with all post-closure requirements of WAC 173-306-410, and 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) Prevent run-on and run-off from eroding or otherwise damaging the final cover;

(iii) Maintain and monitor the leak detection system in accordance with subsection (4)(b) of this section, where such a system is present; the owner or operator shall immediately remove any accumulated liquid and notify the department of any leaks into the leak detection system within seven days after detecting the leak. Notification shall include a schedule for determining the cause of the leak and any remedial measures or increased ground water monitoring to assure that the performance standards of subsection (2)(a) of this section are met;

(iv) Operate the leachate collection and removal system; and

(v) Maintain and operate the monitoring systems of WAC 173-306-500.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-440, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-440, filed 4/30/90, effective 5/31/90.]

WAC 173-306-450 Liner and final cap design and construction standards. (1) Applicability. This section applies to owners or operators of facilities that monofill combined or separated special incinerator ash, except as WAC 173-306-400 provides otherwise.

(2) Liner design.

(a) Owners or operators who monofill combined or separated fly ash and bottom ash shall comply with the requirements of Design A, subsection (3) of this section.

(b) Owners or operators who demonstrate ability to maintain the permeability requirements of Design B during an eighteen-month demonstration period may seek approval to use Design B following the demonstration period.

(3) Design A.

(a) General requirements. Owners or operators shall comply with the liner inspection requirements of WAC 173-306-440 (4)(d) and siting and design requirements of WAC 173-306-440 (3) and (4). In addition, owners or operators shall:

(i) Thoroughly compact ash residues. Owners or operators shall compact ash residues thoroughly by using compaction equipment.

(ii) Provide daily cover to prevent fugitive dust emissions and run-on and run-off discharges. Cover material may include high density polyethylene or any department approved equivalent material.

(b) Liner design. The liner must be an engineered liner of the following design from bottom to top:

(i) 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. The foundation slope must be a minimum of two percent;

(ii) Next, a single composite liner consisting of an engineered soil liner at least two feet thick that has permeability of 1 x 10^{-7} cm/sec or the equivalent upon which a synthetic liner of sixty mils high density polyethylene or other material of equivalent mechanical strength and chemical resistance is placed. Liner slopes must be a minimum of four percent;

(iii) Next, a leachate detection system consisting of a minimum of twelve inches of sand or equivalent material with a permeability greater than or equal to 1 x 10^{-2} cm/sec with drain pipes;

(iv) Next, a synthetic liner of sixty mils high density polyethylene or other material of equivalent mechanical strength and chemical resistance;

(v) Next, a leachate collection and removal system that consists of a minimum of twelve inches of sand or equivalent material with a permeability greater than or equal to 1 x 10^{-2} cm/sec with drain pipes; and

(vi) A fabric filter placed between the drainage layer and the first lift of special incinerator ash.

(4) Design B. Owners or operators who monofill combined or separated fly and bottom ash shall comply with these design criteria.

(a) General requirements. Owners or operators shall comply with the liner inspection requirements of WAC 173-306-440 (4)(d) and siting and design requirements of WAC 173-306-440 (3) and (4). In addition, owners or operators shall:

(i) Compact ash residues to a permeability of 1 x 10^{-5} cm/sec. All ferrous material will be removed using magnetic separation or an equivalent method approved by the department so that the pozzolanic effect of compacted ash will not be impeded.

(ii) Lifts will be tested for ash permeability using guidance established by the department. Lift thickness before compaction may not exceed one foot.

(A) Design B liner design may be used as long as lift permeability tests at 1 x 10^{-5} cm/sec or less.

(B) If the ash permeability requirement cannot be maintained, the owner or operator shall immediately close the Design B cell according to the closure requirements of WAC 173-306-410 and subsection (5) of this section and resume disposal activities using the Design A liner.

(iii) Provide daily cover to prevent fugitive dust emissions and run-on and run-off discharges. Cover material may include high density polyethylene or any department approved equivalent material.

(b) Liner design. The liner must be an engineered liner of the following design:

(i) 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. Foundation slope must be a minimum of two percent;

(ii) Next, a single composite liner that consists of an engineered soil liner at least two feet thick that has a permeability of 1 x 10^{-7} cm/sec or the equivalent upon which a synthetic liner of sixty mils high density polyethylene or other material of equivalent mechanical strength and chemical resistance rests. Liner slopes must be a minimum of four percent;

(iii) Next, a leachate collection system that consists of a minimum of twelve inches of sand or equivalent material with a permeability greater than or equal to 1 x 10^{-2} cm/sec with drain pipes; and

(iv) A fabric filter placed between the drainage layer and the first layer of special incinerator ash.

(5) Final cap design. All owners or operators of special incinerator ash monofills shall comply with the following design requirements.

(a) The final cap shall maintain a surface slope between two and five percent and side slope of no more than thirty-three percent and shall consist, from bottom to top, of:

(i) Two feet of ash, well graded (with ferrous material removed and having proportional size distribution of ash particles) and thoroughly compacted;

(ii) Next, a layer, system, or mechanism capable of detecting cap failure;

(iii) Next, a fabric filter overlaid by at least two feet of clay that has a permeability of 1 x 10^{-7} cm/sec upon which a synthetic liner of sixty mils high density polyethylene or other material of equivalent mechanical strength and chemical resistance rests; and

(iv) Eighteen inches of native soil covered by six inches of topsoil.

(b) Final cap inspections must be done in accordance with the liner inspection requirements of WAC 173-306-440 (4)(d).

(c) In case of cap failure, immediately notify the department with a plan for remedial action.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-450, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-450, filed 4/30/90, effective 5/31/90.]

WAC 173-306-470 Financial assurance. (1) Applicability.

These standards apply to all new and expanded monofill facilities, and to existing monofill facilities that have not closed before or within twelve months after the effective date of this chapter.

(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 must be in current dollars and must represent the cost of closing the facility in accordance with the closure requirements in WAC 173-306-410.

(i) The cost estimate must 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 173-306-410;

(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 may not be reduced by allowance for salvage value of equipment, ash, or the resale value of property or land.

(b) Each owner or operator must 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) A change in the expected year of closure affects the closure plan; or

(iii) The 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 thirty days before the anniversary date 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. Any cost changes must be factored into a revised closure cost estimate. The revised cost estimate must be submitted to the department.

(d) During the operating life of the facility, and when the estimate has been adjusted in accordance with (c) of this subsection, the owner or operator shall make available for review the closure cost estimate prepared in accordance with (a) and (b) of this subsection.

(e) The department shall evaluate each cost estimate and may accept, or at its discretion require revision of, the cost estimate in accordance with its evaluation.

(f) The department may require the facility owner or operator to adjust the cost estimate in accordance with the department's review and direction.

(3) Financial assurance account for closure. Each owner or operator of special incinerator ash monofill facility shall establish a financial assurance account in an amount that, over the life of the facility, will accumulate funds at a rate that will enable premature closure during the monofill life. The total amount must be equal to the closure cost estimate prepared in accordance with subsection (2) of this section.

(a) Applicable monofill facilities that accept special incinerator ash must choose from the following financial assurance account options or combination of options:

(i) For monofill disposal facilities owned or operated by municipal corporations, the closure and post-closure reserve account must 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 special incinerator ash activity; or published Budget Accounting Reporting System Manual; or

(B) The cash and investments held in a nonexpendable trust fund.

(ii) Closure trust fund established with an entity that 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 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 may not constitute an asset of the facility owner or operator.

(c) Any income in excess of the closure cost estimate accruing to the established closure financial assurance account will be used at the owner's discretion.

(d) Excess moneys remaining in the closure financial assurance account after the department has certified the completion of closure as identified in WAC 173-306-410 (4)(f)(i) must be returned to the 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 must be in current dollars and must represent the total cost of completing post-closure activities for the facility for a thirty-year post-closure period in accordance with the post-closure requirements in WAC 173-306-410.

(i) The post-closure cost estimate must 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 173-306-410;

(ii) The post-closure plan shall project 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 may not be reduced by allowance for salvage, value of equipment, ash, or the resale value of property or land.

(b) Each owner or operator shall prepare a new post-closure costs estimate for the remainder of the post-closure care thirty-year period in accordance with (a) and (c) of this subsection, whenever:

(i) Change in the post-closure plan increases the cost of post-closure care; or

(ii) The department directs the owner or operator to revise the post-closure plan or post-closure cost estimate.

(c) Each owner or operator shall review the post-closure cost estimate thirty days before the annual 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. Any cost changes must be factored into a revised post-closure cost estimate and the revised cost estimate must be submitted to the department.

(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 an applicable monofill 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) Owners or operators of applicable monofill facilities that accept special incinerator ash shall choose from the following options or combinations of options for accounting for the financial assurance account:

(i) For monofill disposal facilities owned or operated by municipal corporations, the post-closure reserve must 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 special incinerator ash activity; or

(B) Cash and investments held in a nonexpendable trust fund.

(ii) Post-closure trust fund established with an entity that 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 department. 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) For private disposal facilities that accept public waste, established post-closure financial assurance accounts may not constitute an asset of the facility owner or operator.

(c) Any income accruing to the established post-closure financial assurance account will be used at the owner's discretion.

(d) Excess moneys remaining in the post-closure financial assurance account after the department has certified the completion of post-closure requirements identified in WAC 173-306-410 (7)(c) must be returned to the owner or operator.

(6) Closure/post-closure financial assurance account establishment and reporting.

(a) Closure and post-closure financial assurance funds must be generated at each facility by transferring a percentage of the facility user fees to the selected financial assurance instrument at the agreed upon rate to be specified in the closure and post-closure plans so that adequate closure and post-closure funds will be generated to ensure full implementation of the approved closure and post-closure plans.

(b) Each applicable facility owner or operator shall establish a procedure with the financial assurance instrument trustee for notification of nonpayment of funds to be sent to the Department of Ecology, Solid and Hazardous Waste and Financial Assistance Program, P.O. Box 47600, Olympia, WA 98504-7600.

(c) Each owner or operator shall file with the department an annual audit of the financial assurance accounts established for closure and post-closure activities, and a statement of the percentage of user fees diverted to the financial assurance instruments.

(i) For monofill disposal facilities owned and operated by municipal corporations, the closure reserve account, including each of the post-closure care years, must be audited according to the audit schedule of the office of state auditor and must be filed with the department of ecology.

(ii) For monofill disposal facilities not owned or operated by municipal corporations:

(A) Annual audits must be conducted by a certified public accountant licensed in the state of Washington, and must be filed with the department 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 that demonstrate the proportion of closure completed during the preceding year as specified in the closure and post-closure plans.

(d) Owners or operators of an existing monofill disposal facility may submit to the department a written request with the annual audit asking for a waiver from applying 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 should include alternate methods for funding the facility's closure and/or post-closure financial assurance account;

(ii) The waiver request review procedure will be conducted according to WAC 173-306-900.

(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 must be amended.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-470, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-470, filed 4/30/90, effective 5/31/90.]

WAC 173-306-480 Treatment (including solidification and stabilization) standards. (1) Applicability. The standards of this section apply to treatment, as defined in WAC 173-306-100, of any special incinerator ash subject to this chapter. These standards do not apply to the manual or mechanical removal of ferrous metal from ash residues.

(2) Requirements. All owners and operators shall design, construct, operate, maintain, and close treatment facilities so as to:

(a) Meet the general facility standards of WAC 173-306-405;

(b) Only treat special incinerator ash in tanks, reaction vessels, furnaces (such as glass furnaces), containers, or totally enclosed treatment facilities (such as pipelines). No treatment process may be designed to occur in ash piles, surface impoundments, or land treatment facilities;

(i) The department shall review and approve tank and reaction vessel design. All tanks and reaction vessels will be closed or otherwise designed to avoid emissions of dusts or vapors to the atmosphere. Tanks and reaction vessels must be of sufficient thickness and corrosion resistance to prevent rupture;

(ii) Totally enclosed treatment facilities must be in good condition and of a design and construction to avoid rupture under maximum operating conditions and must be capable of being inspected periodically; and

(iii) Furnaces must be in good condition structurally, designed and operated to accept only special incinerator ash and capable of being inspected periodically. The department may review and approve furnace design.

(c) Meet the performance standards of WAC 173-306-440(2). The department shall specify the type and frequency of all sampling and monitoring necessary to assure compliance.

(d) Assure that treatment of special incinerator ash occurs under conditions spelled out in prototype, pilot plant or full scale operation. The design must be approved by the department and the department shall specify operating conditions.

(e) Control fugitive dust emissions in the handling of special incinerator ash by:

(i) Collecting and handling in enclosed buildings or the equivalent (e.g., covered conveyors and transfer points); and

(ii) Adding moisture, dust suppressants, or other methods as necessary.

(f) Comply with chapter 296-62 WAC, the general occupational health standards.

(g) Assure that treated special incinerator ash is disposed of according to this chapter or chapter 173-304 WAC, the minimum functional standards for solid waste, if the residues are designated as solid waste.

(h) Close the treatment facility according to the requirements of WAC 173-306-410.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-480, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-480, filed 4/30/90, effective 5/31/90.]

WAC 173-306-490 Ash utilization standards. (1) Applicability.

(a) These standards apply to persons who utilize special incinerator ash including:

(i) Generators of special incinerator ash;

(ii) Owners and operators of disposal facilities; and

(iii) Persons who neither generate nor dispose of special incinerator ash but are involved in the reuse or utilization of special incinerator ash.

(b) These standards do not apply to the following wastes and waste processes:

(i) Ferrous metal separation from ash;

(ii) Special incinerator ash that is reinjected into the incinerator or energy-recovery facility from which it was produced;

(iii) Reclamation of nonferrous metals.

(2) Standards.

(a) Accumulation before reuse or utilization.

(i) All ash for utilization must be stored in totally enclosed buildings.

(ii) Floor or surface drains serving storage areas may not be connected to uncontaminated storm water run-off drains. Contaminated water must be processed according to WAC 173-306-200 (3)(c)(ii).

(iii) All ash not utilized within one calendar year of generation is subject to:

(A) The management plan requirements of WAC 173-306-200 if a generator is accumulating the ash; or

(B) The permitting and facility standard requirements of WAC 173-306-300 and 173-306-400, if a disposal facility is accumulating the ash.

(b) Use constituting disposal. Use constituting disposal is applying ash to the land or placing ash on the land in a manner constituting disposal, or applying ash contained in a product to the land or placing ash products on the land in a manner constituting disposal. Placement on the land includes placement in water (such as in reef construction).

(i) Persons wishing to reuse or utilize ash in a manner constituting disposal shall apply for a permit under WAC 173-306-310.

(ii) Persons reusing or utilizing ash in a manner constituting disposal are subject to the following sections of the general facility standards:

(A) WAC 173-306-405(2);

(B) WAC 173-306-405 (3)(b);

(C) WAC 173-306-405 (5)(a), (b), (c), and (f); and

(D) WAC 173-306-405(7).

(iii) The department will base its decision on whether to issue a permit upon the following factors:

(A) The effectiveness of the utilized ash or ash product for the claimed use;

(B) The degree to which the utilized ash is like an analogous product;

(C) The extent to which the utilized ash or ash product minimizes loss or escapes to the environment;

(D) The extent to which the utilized ash or ash product impacts public health, the environment, and employee health given a reasonable worst case exposure, risk assessment analyses and compliance with the performance standards of WAC 173-306-440(2);

(E) The extent to which an end market for the utilized ash and ash product is guaranteed;

(F) The time period between generating the ash and utilization;

(G) The degree to which the end uses (and users) can be tracked and recorded; and

(H) Other factors as appropriate.

(iv) The department may require that applicants apply for a demonstration permit or class use permit under WAC 173-306-320, if available information exists to satisfy the informational requirements of (b)(ii) and (iii) of this subsection.

(c) Utilization as ingredients in industrial products, or as effective substitutes. The utilization of ash in industrial products or as effective substitutes for commercial products are activities that ordinarily are not considered to be waste management because they are like normal production processes and/or the products are used like commercial products. (E.g., ash as a substitute in cement construction blocks is an example.)

(i) The department may grant requests for classifying that type of reuse or utilization for solely commercial purposes, if:

(A) The applicant shows that the ash or ash products are recycled in a manner so that they closely resemble products or raw materials rather than waste; and

(B) The applicant addresses the factors of (b)(iii) of this subsection (except for (2)(b)(iii)(G)).

(ii) Public review of the decision to grant or deny such a request must be conducted according to WAC 173-306-900 (4), (5), and (6).

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-490, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-490, filed 4/30/90, effective 5/31/90.]

WAC 173-306-495 Other methods of ash disposal. (1) Applicability. This section applies to other methods of ash disposal not specifically identified elsewhere in this chapter, nor excluded from this chapter.

(2) Requirements. Owners and operators of other methods of ash disposal shall:

(a) Comply with the requirements in WAC 173-306-405;

(b) Obtain a permit under WAC 173-306-300 from the department, by submitting an application containing information required in WAC 173-306-330, and other information as may be required by the department including:

(i) Preliminary engineering reports and plans and specifications; and

(ii) A closure plan.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-495, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-495, filed 4/30/90, effective 5/31/90.]

WAC 173-306-500 Monitoring and sampling methods. (1) Applicability. These requirements apply to owners and operators of incinerators, energy recovery facilities, disposal facilities, and management facilities who are required to perform ash sampling, analyses and testing, ground water and air quality monitoring under this chapter.

(2) Ground water monitoring requirements.

(a) The ground water monitoring system:

(i) Must consist of at least one background or up-gradient well and three down-gradient wells, installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer and all hydraulically connected aquifers below the active portion of the facility.

(ii) Must represent the quality of background water that has not been affected by leakage from the active area; and

(iii) Must represent the quality of ground water passing the point of compliance. Additional wells may be required by the department in complicated hydrogeological settings or to define the extent of contamination detected.

(b) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must allow collection of representative ground water samples. Wells must be constructed in such a manner as to prevent contamination of the samples, the sampled strata, other substrata aquifers and waterbearing strata. Construction must be accomplished in accordance with chapter 173-160 WAC, minimum standards for construction and maintenance of water wells.

(c) The ground water monitoring program shall include, at a minimum, procedures and techniques for:

(i) Decontamination of drilling and sampling equipment;

(ii) Sample collection;

(iii) Sample preservation and shipment;

(iv) Analytical procedures and quality assurance;

(v) Chain of custody control; and

(vi) Procedures to ensure employee health and safety during well installation and monitoring.

(d) Sample constituents.

(i) Owners or operators of all facilities shall test for the following parameters:

(A) Temperature;

(B) Conductivity;

(C) pH;

(D) Chloride;

(E) Nitrate, nitrite, and ammonia as nitrogen;

(F) Sulfate;

(G) Dissolved iron, cadmium, lead, and mercury;

(H) Dissolved zinc and manganese;

(I) Chemical oxygen demand;

(J) Total organic carbon;

(K) Calcium and sodium; and

(L) Gamma radiation.

(ii) The department may specify additional or fewer constituents depending upon the leachate analyses, the composition of the ash, and other information.

(iii) To detect the parameters of (d)(i) of this subsection, EPA Publication Number SW-846, "Test methods for evaluating solid waste physical/chemical methods" must be used.

(e) The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

(f) The owner or operator shall use a department-approved statistical procedure for determining whether a significant change over background has occurred.

(g) The owner or operator must determine ground water quality at each monitoring well at the compliance point at least quarterly from start-up through the post-closure care period. The owner or operator must express the ground water quality at each monitoring well in a form necessary for the determination of statistically significant increases.

(h) The owner or operator must determine and report the ground water flow rate and direction in the uppermost aquifer at least annually.

(i) If the owner or operator determines that there is a statistically significant increase for parameters or constituents at any monitoring well at the compliance point, the owner or operator must:

(i) Notify the department of this finding in writing within seven days of receipt of the sampling data. The notification must indicate which parameters or constituents have shown statistically significant increases;

(ii) Immediately resample the ground water in all monitoring wells and determine the concentration of all constituents listed in the definition of contamination in WAC 173-306-100 including additional constituents identified in the permit and whether there is a statistically significant increase such that the ground water performance standard has been exceeded. The department must be notified within fourteen days of receipt of the sampling data.

(j) The department may require modifications to the disposal facility, the plan of operation or the permit, including facility closure, if the performance standard of WAC 173-306-440 (2)(a) is exceeded and, in addition, may revoke any permit and require reapplication under WAC 173-306-310.

(3) Modifications. An owner or operator required to modify the facility or plan of operation under this section must first obtain approval from the department and must at a minimum:

(a) Implement modifications that reduce contamination and, if possible, prevent constituents from exceeding their respective concentration limits at the compliance point by removing the constituents, treating them in place or other remedial measures; and

(b) Begin modifications according to a written schedule after the ground water performance standard is exceeded.

(4) Ash and soil sampling, and analysis.

(a) Ash residue samples taken for the purpose of determining their designation status as a special incinerator ash waste must be conducted according to guidance established by the department. Ash samples taken for the purpose of determining carbon residue and for determining dioxins and dibenzofuran content, if different from samples taken for designation status under chapter 173-303 WAC, must also be conducted according to guidance established by the department. Representative sampling methods and frequency as developed in guidelines by the department must be employed.

(b) Ash samples must be analyzed as follows:

(i) For designation purposes, as a special incinerator ash waste, the samples must be analyzed according to:

(A) "Chemical testing methods for complying with the state of Washington dangerous waste regulation," WDOE 83-13;

(B) "Biological testing methods," WDOE 80-12;

(C) "Test methods for evaluating solid waste, physical/chemical methods," SW 846.

(ii) For chlorinated-p-dioxins and dibenzofurans, 40 CFR Part 261 Appendix X is adopted by reference.

(iii) For cadmium in soil, method 7130 or 7131 cited in "Test methods for evaluating solid waste, physical/chemical methods," SW 846.

(5) Ambient air quality sampling for lead. Ambient lead concentrations must be measured and reported according to 40 CFR Part 50 Appendix G, which is adopted by reference, except that the sampling frequency will be determined by the department: Provided, That the department has not adopted "Compendium of methods for the determination of inorganic compounds in ambient air" (EPA/625/R-96/01a, July 1999).

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-500, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-500, filed 4/30/90, effective 5/31/90.]

WAC 173-306-900 Variances. (1) Any person applying for an ash disposal permit or who owns or operates an ash generation or disposal facility may apply to the department for a variance from any section of this chapter. The application must be accompanied by information such as the department may require.

(2) The applicant shall provide usual and reasonable public notification within the area that will be impacted, including publication in the area's major general circulation newspaper and mailing notices to surrounding property owners. Proof of compliance must be submitted with the variance application.

(3) The department shall give public notice of an application and allow a thirty-day public comment period. Notice must be mailed to persons who have written to the department asking to be notified of all variance requests and shall indicate that a public hearing may be requested.

(4) In considering a variance request, the department shall consider:

(a) The relative interests of the applicant, other property owners likely to be affected by the applicant's activity and the general public;

(b) If the ash handling practices or facility location protect public health, worker health, safety or the environment to a degree equal to or greater than the standard from which a variance is requested;

(c) Whether compliance with the rule from which the variance is sought would produce hardship without equal or greater benefits to the public;

(d) Whether compliance with the rule will require spreading of costs over a considerable time period; and

(e) Whether the timetable is for a period that is sufficient to comply with this chapter.

(5) The department shall approve or disapprove a variance request within ninety days of receipt unless the applicant and the department agree to a continuance.

(6) Any variance granted under this section may be renewed. Application for a variance renewal must be made at least sixty days before the expiration of the variance and must follow the application process of subsections (1) through (5) of this section.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-900, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-900, filed 4/30/90, effective 5/31/90.]

WAC 173-306-9901 Maximum contaminant levels for ground water. Maximum contaminant levels for ground water are those specified in chapter 248-54 WAC, as the primary drinking water standards. Analytical methods for these contaminants may be found in the Code of Federal Regulations, 40 CFR Part 141. (These contaminant levels are to be considered interim levels for the purpose of regulating disposal facilities and must be used until the department establishes ground water quality standards for all types of activities impacting ground water.)

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-9901, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-9901, filed 4/30/90, effective 5/31/90.]

Chapter 173-307 WAC
POLLUTION PREVENTION PLANS

WAC

WAC 173-307-010 Purpose. This chapter implements chapter 70.95C RCW, an act relating to hazardous waste reduction. The act encourages voluntary efforts to redesign industrial, commercial, production, and other processes to result in the reduction or elimination of hazardous waste by-products and to maximize the in-process reuse or reclamation of valuable spent material. The act establishes a legislative policy to encourage reduction in the use of hazardous substances and reduction in the generation of hazardous waste whenever economically and technically practicable. It also adopts, as a policy goal for Washington state, the reduction of hazardous waste generation through hazardous substance use reduction and waste reduction techniques by fifty percent by 1995. Some individual facilities may have the ability to reduce the use of hazardous materials and the generation of hazardous wastes by far more than fifty percent while others may not be able to reduce by as much as fifty percent. Therefore, the fifty percent reduction goal is not applied as a regulatory requirement. The plans provided for in this chapter are intended to achieve, for each facility, the greatest reduction economically and technically practicable. The intent of the department of ecology is to provide technical assistance, to the greatest extent possible, to those required to prepare facility plans. The purpose of this chapter is to establish the specific elements that must be included in the documents required of hazardous waste generators and hazardous substance users under the act. The rule also establishes completion dates and implements other requirements in the act. Copies of all rules or statutes cited in this chapter are available from Records Management, Department of Ecology, P.O. Box 47600, Olympia, Washington 98504-7600.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-010, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-010, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-010, filed 4/1/91, effective 5/2/91.]

WAC 173-307-015 Applicability. (1) The requirements of WAC 173-307-010 through 173-307-140 apply to all hazardous substance users as defined in this chapter and to hazardous waste generators who generate more than two thousand six hundred forty pounds of hazardous waste per year, except for those facilities that are primarily treatment, storage, and disposal facilities or recycling facilities. Used oil to be rerefined or burned for energy or heat recovery may not be used in the calculation of hazardous wastes generated for purposes of this rule, and is not required to be addressed by plans prepared under this rule. For the purposes of this section, neither hazardous waste reported on the dangerous waste annual report as having been either recycled on-site or recycled for beneficial use off-site, nor amounts of hazardous substances introduced into a process and subsequently recycled for beneficial use may be used in the calculation of hazardous waste generated. A facility may petition the director to exclude hazardous wastes recycled for beneficial use even if they were not reported as such on the dangerous waste annual report. Documentation from the hazardous waste handling facility that the hazardous waste was recycled for beneficial use must be submitted along with the petition.

(2) Except as noted in subsection (3) of this section, each hazardous substance user and hazardous waste generator identified above shall prepare one plan for each facility owned or operated.

(3) A person with multiple interrelated facilities where a significant majority of the processes are substantially similar, as defined in this chapter, may prepare a single plan covering one or more of those facilities.

(a) To obtain approval, a person desiring to submit a single plan under this provision shall submit documentation to the director that a significant majority of the processes at the facilities are substantially similar before developing a plan. This documentation must be submitted by May 1 of the year before the plan due date.

(b) If a single plan is being prepared for two or more interrelated facilities with substantially similar processes, the sum total of the hazardous waste generated and the hazardous substances used by these facilities must be considered when applying any of the thresholds and/or percentages required by this chapter.

(c) In instances where a person has interrelated facilities without substantially similar processes, a single document may be prepared, but it must contain separate detailed plans for each facility.

(4) Facilities required by this chapter to prepare plans are also required to pay a hazardous waste fee, as described in chapter 173-305 WAC. The requirements of WAC 173-305-010 through 173-305-050 and 173-305-210 through 173-305-240 specifically apply.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-015, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-015, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-015, filed 4/1/91, effective 5/2/91.]

WAC 173-307-020 Definitions. As used in this chapter, the following terms have the meanings indicated unless the context clearly requires otherwise.

(1) "Closed-loop recycling" means that the entire process through completion of any reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance. Recycled materials are returned to the original process or processes.

(2) "Dangerous waste" means any discarded, useless, unwanted, or abandoned nonradioactive substances including, but not limited to, certain pesticides, or any residues or containers of those substances which are disposed of in such a quantity or concentration that would pose a substantial present or potential hazard to human health, wildlife, or the environment because those wastes or constituents or combinations of those wastes:

(a) Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or

(b) Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.

Dangerous wastes specifically includes those wastes designated as extremely hazardous by rules adopted under chapter 70.105 RCW.

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

(4) "Director" means the director of the department of ecology or the director's designee.

(5) "EPA/state dangerous waste identification number" means the number assigned by the EPA (Environmental Protection Agency) or by the department of ecology to each generator and/or transporter and each treatment, storage, and/or disposal facility.

(6) "Extremely hazardous waste" means any dangerous waste which, if disposed of at a disposal site in quantities that would present an extreme hazard to man or the environment:

(a) Will persist in a hazardous form for several years at a disposal site and which, in its persistent form:

(i) Presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic make-up of man or wildlife; and

(ii) Is highly toxic to man and wildlife.

Extremely hazardous waste specifically includes those wastes designated as extremely hazardous by rules adopted under chapter 70.105 RCW.

(7) "Facility" means any geographical area that has been assigned an EPA/state dangerous waste identification number. In the case of a hazardous substance user not having an EPA/state dangerous waste identification number, facility means all buildings, equipment, structures, and other stationary items located on a single site or on contiguous or adjacent sites and owned or operated by the same person.

(8) "Fee" means the annual hazardous waste fees imposed under RCW 70.95E.020 and 70.95E.030.

(9) "Generate" means any act or process that produces hazardous waste or which first causes a hazardous waste to become subject to regulation.

(10) "Hazardous substance" means:

(a) Any hazardous substance listed as a hazardous substance as of the effective date of this section in accordance with Section 313 of Title III of the Superfund Amendments and Reauthorization Act and any further updates; and

(b) All ozone depleting compounds as defined by the Montreal Protocol of October 1987 and any further updates of the Montreal Protocol.

(11) "Hazardous substance use reduction" means the reduction, avoidance, or elimination of the use, toxicity, or production of hazardous substances without creating substantial new risks to human health or the environment. "Hazardous substance use reduction" includes proportionate changes in the usage of hazardous substances or the hazardous substances changes that are a result of production changes or other business changes.

(12) "Hazardous substance user" means any facility required to report under Section 313 of Title III of the Superfund Amendments and Reauthorization Act, except for those facilities which only distribute or use fertilizers or pesticides intended for commercial agricultural applications.

Note: This definition refers to those SARA Title III, Section 313 reporters who must prepare a plan, whereas the definition of hazardous substance refers to the substances that must be addressed in the plan.

(13) "Hazardous waste" includes all dangerous and extremely hazardous wastes, but:

(a) Does not include radioactive wastes or a substance composed of both radioactive and hazardous components; and

(b) Does not include any hazardous waste generated as a result of a remedial action under state or federal law.

(14) "Hazardous waste generator" or "generator" means any person generating hazardous waste that is subject to regulation by the department.

(15) "Hazardous waste reduction" means all in-facility practices that reduce, avoid, or eliminate the generation of hazardous waste or the toxicity of hazardous waste, before the hazardous waste is generated, without creating substantial new risks to human health or the environment.

(16) "Interrelated facilities" means multiple facilities owned or operated by the same person.

(17) "Office" means the hazardous waste and toxic reduction program.

(18) "Plan" means the plan provided for in RCW 70.95C.200.

(19) "Person" means an individual, trust, firm, joint stock company, partnership, association, state, public or private or municipal corporation, commission, political subdivision of a state, interstate body, the federal government, including any agency or officer thereof, and any Indian tribe or authorized tribal government.

(20) "Process" means one or a number of steps that produce an end product or service, or a component to be incorporated into an end product or service.

(21) "Product" means any hazardous substance or mixture containing hazardous substances that is used by a facility in a production or service process. Metals or metal alloys used by the facility are not considered "products" if they do not become incorporated into the hazardous waste streams and have no known pathway for the release of metals to the environment, either at the facility or after their use at the facility, such as from ultimate disposal by the consumer. Facilities will have to decide whether to group similar products (for example with different brand names) and list them as a single product. While some flexibility is left to the facility, products must be identified as a single product if they have a similar chemical composition and may be used interchangeably by the facility.

Note: The term "product" as defined here and used throughout this chapter is not to be confused with the term "end product," which specifically refers to the "output" of a production process.

(22) "Recycled for beneficial use" means the use of hazardous waste, either before or after reclamation, as a substitute for a commercial product or raw material, but does not include:

Use constituting disposal;

Incineration; or

Use as a fuel.

(23) "Recycling" means reusing waste materials and extracting valuable materials from a waste stream. Recycling does not include burning for energy recovery.

Note: While burning for energy recovery may be preferable to disposal, burning for energy recovery does not count as recycling for the purpose of chapter 70.95C RCW.

(24) "Remedial action wastes" means hazardous wastes that result from the cleanup of sites under state or federal hazardous waste laws.

(25) "Shifting of risks" means changing the character, location, or receptor of a toxic material without achieving a substantial reduction in the overall risk to health and safety or the environment.

(26) "Substantially similar processes" means processes that are essentially interchangeable, inasmuch as they use similar equipment and materials and produce similar products or services and generate similar wastes.

(27) "Treatment" means the physical, chemical, or biological processing of waste to render it completely innocuous, produce a recyclable by-product, reduce toxicity, or substantially reduce the volume of material that requires disposal as described in the priorities established in RCW 70.105.150. Treatment does not include incineration.

(28) "Used oil" means:

(a) Lubricating fluids that have been removed from an engine crankcase, transmission, gearbox, hydraulic device, or differential of an automobile, bus, truck, vessel, plane, heavy equipment, or machinery powered by an internal combustion engine;

(b) Any oil that has been refined from crude oil, used, and as a result of use, has been contaminated with physical or chemical impurities; and

(c) Any oil that has been refined from crude oil and, as a consequence of extended storage, spillage, or contamination, is no longer useful to the original purchaser. "Used oil" does not include used oil to which hazardous wastes have been added.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-020, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-020, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-020, filed 4/1/91, effective 5/2/91.]

WAC 173-307-030 Plan requirements. This section establishes the specific elements required to be included in a plan. The purpose of a plan is to require serious consideration of ways in which processes and procedures may be modified to reduce dependence upon hazardous substances and/or the generation of hazardous wastes. All plans must consider opportunities based on the following priorities: Hazardous substance use reduction and hazardous waste reduction, recycling, and treatment. The plans shall consist of the following parts:

(1) Part one. Part one shall include:

(a) A written policy expressing management and corporate support for the plan and a commitment to implement planned activities and achieve established goals.

(b) The plan scope and objectives.

(c) A description of the facility type, a description of products made and/or services provided, and a statement or listing of the current levels of production or service activity in units of measure appropriate to the industry or activity;

(d) A general overview of the processes used in production or service activities (a schematic drawing may be included);

(e) A statement providing, for the last calendar year, the total pounds of extremely hazardous waste and total pounds of dangerous waste reported on Form 4, Dangerous Waste Annual Report, and, if applicable, the total pounds of toxic releases reported on Form R under SARA Title III, Section 313; and

(f) A description of current reduction, recycling, and treatment activities and documentation of hazardous substance use reduction and hazardous waste reduction efforts that were completed before the first plan due date specified in WAC 173-307-050. Clearly separate the explanations of reduction activities from recycling and other management activities.

(2) Part two. Part two shall include an identification of hazardous substances used and hazardous wastes generated by the facility; a description of the facility processes; an identification of reduction, recycling, and treatment opportunities; an evaluation of those opportunities; a selection of proposed options; a policy to prevent shifting of risks; performance goals; and an implementation schedule. Specifically, Part two shall include:

(a) An identification of products containing hazardous substances used and hazardous wastes generated. This must be based on actual usage and generation during the most recent calendar year for which records are available. This task can be accomplished by choosing one of two approaches. The approaches are identified as the "pounds approach" and the "percentage approach." Look at the following descriptions and requirements of each of these and determine which one you wish to use.

(i) "Pounds approach."

This approach requires you to identify the types and amounts, in either weight or volume, of hazardous waste generated and products containing hazardous substances used up to these threshold levels:

(A) All dangerous waste streams five hundred pounds or greater, any smaller dangerous waste streams that individually represent ten percent or more of the total annual hazardous wastes, and all extremely hazardous waste streams subject to regulation by the department. If this combination equals less than ninety percent of the total hazardous wastes generated, then additional dangerous wastes generated at the facility must be included until ninety percent of the total is reached; and

(B) Each product used that contains a total of fifty percent or more of any combination of hazardous substances if one thousand pounds or more was used; each product used that contains a total of between twenty-five percent and forty-nine percent of hazardous substances if four thousand pounds or more was used; and each product used that contains a total of between ten and twenty-four percent of hazardous substances if ten thousand pounds or more was used. Any product that contains less than ten percent of any hazardous substances is not required be included in the list regardless of the amount of the product used.

(C) Office products and products that are used at the facility for nonprocess routine janitorial or grounds maintenance related activities may be excluded from this list.

(D) Hazardous substances used and hazardous wastes generated in laboratory research need not be listed. Note: See (2)(k) of this subsection for discussion on this issue.

(ii) "Percentage approach."

This approach requires you to identify the types and amounts, in either weight or volume, of hazardous waste generated and products containing hazardous substances used up to these threshold levels;

(A) All extremely hazardous waste and enough additional dangerous waste to reach ninety percent of all the hazardous waste generated; and

(B) Ninety percent of all the products used that contain hazardous substances. The person making this list should attempt to include those products which contain the highest concentrations of hazardous substances and the most toxic hazardous substances.

(C) Office products and products that are used at the facility for nonprocess routine janitorial or grounds maintenance related activities may be excluded from this list.

(D) Hazardous substances used and hazardous wastes generated in laboratory research are not required to be listed. Note: See (2)(k) of this subsection for discussion on this issue.

(iii) Determinations of whether these quantities are met or exceeded for either approach must be based on the best available information. This information may be included or referenced in the plan. Available information may include any or all of the following as necessary to determine quantities of hazardous substances contained in products: Information available from material safety data sheets, information furnished upon request from manufacturers or suppliers of hazardous substances or products containing hazardous substances, information obtained from the department, and information otherwise known by the facility owner or operator.

An explanation of the procedures used to determine that the thresholds were met or exceeded must be included in this section of the plan.

(iv) The above thresholds must only be used for plans required to be completed before September 2, 1996. Plans or plan updates completed from that date on shall identify the types and amounts, in either weight or volume, of hazardous waste generated and hazardous substances used up to the following threshold levels;

(A) The "pounds approach" may only be used for identifying hazardous waste after September 2, 1996. This approach may not be used for products containing hazardous substances. The thresholds for hazardous waste are:

All dangerous waste streams five hundred pounds or greater, any smaller dangerous waste streams that individually represent ten percent or more of the total annual hazardous wastes, and all extremely hazardous waste streams subject to regulation by the department. If this combination equals less than ninety-five percent of the total hazardous wastes generated, then additional dangerous wastes generated at the facility must be included until ninety-five percent of the total is reached.

(B) The "percentage approach" remains an optional approach for hazardous waste, but it is the only approach that may be used for products. The thresholds for this approach are:

All extremely hazardous waste and enough additional dangerous waste to reach ninety-five percent of all the hazardous waste generated; and

Ninety-five percent of all the products used that contain hazardous substances.

(C) The exemptions in (ii)(C) and (D) of this subsection remain in effect.

(b) A detailed description of each process in the facility that generates hazardous waste or uses products containing hazardous substances as identified in the chosen approach in (a) of this subsection. This description may include a schematic drawing.

(c) For the hazardous waste and products containing hazardous substances identified in (a) of this subsection within each of the processes identified in (b) of this subsection, an identification, based on thorough research, of all reasonable opportunities for further hazardous substance use reduction, hazardous waste reduction, recycling, and treatment. Thorough research shall include, at a minimum, a review of literature commonly available to that industry or trade. The full range of potentially feasible opportunities must be identified without regard to possible impediments to implementing the opportunities. In identifying opportunities, consideration must be given to alternative approaches which, in the judgment of the facility management, satisfy the same demand for end products or services but use substantially less hazardous substances or result in the generation of substantially less hazardous waste;

(d) An evaluation of the identified opportunities. Opportunities must be grouped by priority and evaluated according to these priorities. The priorities are, in descending order: Hazardous substance use and hazardous waste reduction; recycling; and, treatment. Opportunities of a lower priority must be given consideration only after a determination is made that the higher priority opportunities are inappropriate due to impediments to their implementation. Impediments that are considered acceptable include, but are not limited to:

(i) Adverse impacts on product quality, legal or contractual obligations;

(ii) Economic and technical practicality;

(iii) Safety considerations; and

(iv) The creation of substantial new risks to human health or the environment.

Except with respect to the use and distribution of fertilizers or pesticides intended for commercial agricultural applications, the evaluation of hazardous waste reduction opportunities must include an evaluation of hazardous substance use reduction opportunities for those hazardous substances which subsequently result in hazardous waste streams as well as an evaluation of other opportunities for the reduction of hazardous waste.

The evaluation required under this subsection shall include:

(A) An economic analysis;

(B) A technical evaluation;

(C) An identification of whether, and if so how, the identified opportunity would result in a shifting of risk from one part of a process, environmental medium, or product to another; and

(D) An identification of all impediments to implementing the opportunities.

The economic analysis shall seek to identify the total costs associated with the current hazardous substance use and

hazardous waste generation, management and disposal, compared with comparable costs associated with implementing the alternatives.

Evaluation of each opportunity may be considered complete when enough information is available to select or reject the opportunity for implementation. For opportunities rejected, the reason or reasons for rejecting them must be stated.

(e) A selection of opportunities to be implemented in accordance with the evaluation conducted in (d) of this subsection. For each selected opportunity, the process it affects must be identified, and estimates of the amount, by weight, of the reduction of hazardous substances or products containing hazardous substances and hazardous waste reduction that would be achieved through implementation must be stated, and the amount of hazardous wastes recycled or treated as a result of implementation must be included;

(f) A written policy stating that in implementing the selected options whenever technically and economically practicable, risks will not be shifted from one part of a process, environmental medium, or product to another;

(g) Specific performance goals in each of the following categories, expressed in numeric terms:

(i) Hazardous substances or products containing hazardous substances to be reduced or eliminated from use;

(ii) Hazardous wastes to be reduced or eliminated through hazardous waste reduction techniques;

(iii) Materials or hazardous wastes to be recycled; and

(iv) Hazardous wastes to be treated.

If the establishment of numeric performance goals is not practicable, the performance goals shall include a clearly stated list of objectives designed to lead to the establishment of numeric goals as soon as is practicable. Goals must be set for a five-year period from the first reporting date (see (h) of this subsection regarding implementation activities that will take longer than five years);

(h) A five-year implementation schedule, which shall display planned implementation activities for each of the five calendar years following completion of the plan. Information to be provided shall include, but is not limited to, the opportunities (or phases of opportunities) being implemented and related milestones. Where complete implementation of a selected opportunity will take longer than five years, the schedule shall contain relevant milestones within a five-year period and an estimated date of completion. The schedule may be in table form and organized by opportunities within processes, if desired.

(i) A description of how those hazardous wastes that are not recycled or treated and the residues from recycling and treatment processes are managed may be included in the plan.

(j) Documentation of any research conducted in fulfillment of any of the above subdivisions of this subsection must be available to the department upon request.

(k) For research laboratories, the plan may include, in lieu of all the detailed requirements of this subsection, a description of policies and procedures to be followed by laboratory personnel regarding the use of hazardous substances and the generation of hazardous wastes through laboratory research. These policies and procedures must be consistent with the waste reduction priorities as defined in this chapter.

(3) Part three. Part three shall provide a financial description of the plan, which shall identify costs and benefits realized from implementing selected opportunities to the extent reasonably possible. Part three shall also include a description of accounting systems that will be used to identify hazardous substance use and hazardous waste management costs. Liability, compliance, and oversight costs must be components of these accounting systems.

(4) Part four. Part four of the plan shall include a description of personnel training and employee involvement programs. Each facility required to write a plan is encouraged to advise its employees of the planning process and solicit comments or suggestions from its employees on hazardous substance use and waste reduction opportunities.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-030, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-030, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-030, filed 4/1/91, effective 5/2/91.]

WAC 173-307-040 Executive summary. Upon completion of a plan, the owner, chief executive officer, or other person with the authority to commit management to the plan, such as a facility manager, shall sign and submit an executive summary of the plan to the department. This summary must be available from the department for public inspection upon request. The facility may choose to submit the complete plan to the department rather than prepare an executive summary. In that event, the complete plan must also be available for public inspection.

Executive summaries shall include the following information from the plan:

(1) A written policy expressing management and corporate support for the plan and a commitment to implement planned activities and achieve established goals;

(2) The plan scope and objectives;

(3) A description of the facility type and a summary of product made and/or services provided;

(4) A list of the type and amount of each hazardous waste and products containing hazardous substances as identified in WAC 173-307-030 (2)(a);

(5) A brief description of each process in the facility that generates hazardous waste or uses products containing hazardous substances as listed in subdivision (d);

(6) A description of current reduction, recycling, and treatment activities, and documentation of hazardous substance use reduction and hazardous waste reduction activities completed before the first reporting date specified in WAC 173-307-050;

(7) A summary of all further hazardous substance use reduction, hazardous waste reduction, recycling, and treatment opportunities identified. Opportunities must be identified first for hazardous substance use reduction and hazardous waste reduction, secondly for recycling, and lastly for treatment. A statement of the reason or reasons for rejecting any opportunity from further consideration and a summary of all identified impediments to implementing opportunities must be included;

(8) A description of the opportunities selected to be implemented, process or processes affected, and estimated reductions to be achieved;

(9) Specific performance goals, expressed in numeric terms for each of the categories listed below (assumptions on changing production or service activity levels during the period covered by the plan must be described):

(a) Hazardous substances to be reduced or eliminated from use;

(b) Hazardous wastes to be reduced or eliminated through waste reduction techniques;

(c) Materials or hazardous wastes to be recycled; and

(d) Hazardous wastes to be treated.

If the establishment of numeric performance goals is not practicable, the performance goals shall include a clearly stated list of objectives designed to lead to the establishment of numeric goals as soon as is practicable. Goals must be set for a five-year period from the first reporting date;

(10) The five-year implementation schedule identified in WAC 173-307-030 (2)(h), which shall display planned implementation activities for each of the five calendar years following completion of the plan;

(11) A summary of costs and benefits realized from implementing selected opportunities;

(12) For research labs, the executive summary may include, in lieu of all the detailed requirements of this section, a description of policies and procedures to be followed by laboratory personnel regarding the use of hazardous substances and the generation of hazardous waste through laboratory research. These policies and procedures must be consistent with the waste reduction priorities as defined in this chapter.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-040, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-040, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-040, filed 4/1/91, effective 5/2/91.]

WAC 173-307-050 Due dates. Plans must be completed and executive summaries must be submitted in accordance with the following schedule:

(1) Hazardous waste generators who generated more than fifty thousand pounds of hazardous waste in calendar year 1991 and hazardous substance users who were required to report in 1991, by September 1, 1992;

(2) Hazardous waste generators who generated between seven thousand and fifty thousand pounds of hazardous waste in calendar year 1992 and hazardous substance users who were required to report for the first time in 1992, by September 1, 1993;

(3) Hazardous waste generators who generated between two thousand six hundred forty and seven thousand pounds of hazardous waste in 1993 and hazardous substance users who were required to report for the first time in 1993, by September 1, 1994;

(4) Hazardous waste generators who have not been required to complete a plan on or before September 1, 1994, shall complete a plan by September 1 of the year following the first year that they generate more than two thousand six hundred forty pounds of hazardous waste; and

(5) Hazardous substance users who have not been required to complete a plan on or before September 1, 1994, shall complete a plan by September 1 of the year following the first year that they are required to report under Section 313 of Title III of the Superfund Amendments and Reauthorization Act.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-050, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-050, filed 4/1/91, effective 5/2/91.]

WAC 173-307-060 Plan availability. Plans developed under chapter 173-307 WAC must be kept at the facility and made available for review to authorized representatives of the department. The plan is not a public record under the public disclosure laws of the state of Washington contained in chapter 42.17 RCW, unless submitted in lieu of an executive summary as provided for in WAC 173-307-040.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-060, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-060, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-060, filed 4/1/91, effective 5/2/91.]

WAC 173-307-070 Plan amendments and updates. (1) A plan must be kept reasonably current and may be amended in response to changes in facility operations, substances used, or wastes generated.

(a) Users or generators shall notify the department of an amended plan and submit amendments to their plan or executive summary, whichever was originally submitted, including an identification of which sections have been amended. The implementation schedule of the amended plan and/or new executive summary must be within the original five-year timeline initiated by completion of the original plan.

(b) Even if a plan is amended, a five-year plan update will still be required five years from completion of the first plan, or from the last five-year update.

(2) Every five years, each plan must be updated, and the plan or a new executive summary must be submitted to the department. A plan update shall conform to the requirements for preparing reduction plans as specified in this chapter.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-070, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-070, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-070, filed 4/1/91, effective 5/2/91.]

WAC 173-307-080 Progress reports. Progress reports must be submitted to the department annually on September 1 after the due date of the plan. The purpose of the progress report is to provide information on quantities of hazardous waste and hazardous substances or products containing hazardous substances reduced in the prior twelve-month period.

(1) Progress reports shall include a discussion of:

(a) Performance goals. If numeric performance goals were listed in the plan, progress toward achieving these goals must be discussed. If numeric performance goals were not listed in the plan, progress made toward establishing numeric goals and progress made toward achieving the goals as stated in the plan must be discussed. This discussion shall include:

(i) A description of reduction, recycling, and treatment opportunities that were implemented.

(ii) A description of the process or processes impacted by each opportunity.

(iii) A description of the quantities, by weight, of hazardous substances or products containing hazardous substances reduced and hazardous waste reduced by each option. Esti-

mation techniques, and any assumptions used must be described. Quantities reduced must be displayed in relation to changing production levels. The description shall also include a statement of the level of production or service activity in relation to the level of production or service activity stated in the plan at the time the plan was prepared.

Note: Factors not resulting in actual reductions, such as new estimating techniques, delistings of substances or hazardous wastes, and reclassifications of waste management techniques cannot be counted or claimed as reductions.

(iv) If measurement or estimation techniques are changed from the prior reports in such a way that reductions are not additive for the five-year planning period, a methodology for converting prior reported reductions must be described and recalculations must be provided.

(b) Problems encountered in the implementation process. Problems must be clearly identified and must include a discussion of steps taken or proposed to resolve problems. An update on problems reported in previous progress reports must be included.

(2) Upon the request of two or more users or generators belonging to similar industrial classifications, the department may aggregate data contained in their annual progress reports for the purpose of developing a public record.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-080, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-080, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-080, filed 4/1/91, effective 5/2/91.]

WAC 173-307-090 Review process. A user or generator required to prepare a plan shall permit the director to review the plan to determine its adequacy.

(1) The department may review a plan, executive summary, or an annual progress report to determine whether the document is adequate and shall base its determination solely on whether the document is complete and prepared in accordance with the provisions of this chapter and the requirements of chapter 70.95C RCW.

(2) If a hazardous substance user or hazardous waste generator fails to complete an adequate plan, executive summary, or annual progress report, the department shall notify the user or generator of the inadequacy, identifying specific deficiencies. For the purposes of this section, a deficiency may include failure to develop a plan, failure to submit an executive summary, or failure to submit an annual progress report. The department shall specify a reasonable time frame, of not less than ninety days, within which the user or generator shall complete a modified plan, executive summary, or annual progress report addressing the specified deficiencies.

(3) If the department determines that a modified plan, executive summary, or annual progress report is inadequate, the department may, within its discretion, either require further modification or enter an order under WAC 173-307-100.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-090, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-090, filed 4/1/91, effective 5/2/91.]

WAC 173-307-100 Penalties. (1) If, after having received a list of specified deficiencies from the department, a hazardous substance user or hazardous waste generator required to prepare a plan fails to complete modification of a plan, executive summary, or annual progress report within the time period specified by the department, the department may enter an order under chapter 34.05 RCW finding the user or generator not in compliance with the requirements of RCW 70.95C.200. When the order is final, the department shall notify the department of revenue to charge a penalty fee. The penalty fee must be the greater of one thousand dollars or three times the amount of the user's or generator's previous year's fee, in addition to the current year's fee. If no fee was assessed the previous year, the penalty must be the greater of one thousand dollars or three times the amount of the current year's fee. The penalty assessed under this subsection must be collected each year after the year for which the penalty was assessed until an adequate plan, executive summary, or annual progress report is completed.

(2) If a hazardous substance user or hazardous waste generator required to prepare a plan fails to complete an adequate plan, executive summary, or annual progress report after the department has levied against the user or generator the penalty provided for in subsection (1) of this section, the user or generator must be required to pay a surcharge to the department whenever the user or generator disposes of a hazardous waste at any hazardous waste incinerator or hazardous waste landfill facility located in Washington state, until the required document is completed and determined to be adequate by the department. The surcharge must be equal to three times the fee charged for disposal. The department shall furnish the incinerator and landfill facilities in Washington state with a list of Environmental Protection Agency/state identification numbers of the hazardous waste generators that are not in compliance with the requirements of RCW 70.95C.200.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-100, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-100, filed 4/1/91, effective 5/2/91.]

WAC 173-307-110 Appeals. A user or generator may appeal a department order or a surcharge under RCW 70.95C.220 to the pollution control hearings board under chapter 43.21B RCW.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-110, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-110, filed 4/1/91, effective 5/2/91.]

WAC 173-307-120 Exemptions. A person required to prepare a plan because of the quantity of hazardous waste generated may petition the director to be excused from this requirement. The person must demonstrate to the satisfaction of the director that the quantity of hazardous waste generated was due to unique circumstances not likely to be repeated and that the person is unlikely to generate sufficient hazardous waste to require a plan in the next five years.

[Statutory Authority: Chapter 70.95C RCW. 91-08-041 (Order 90-57), § 173-307-120, filed 4/1/91, effective 5/2/91.]

WAC 173-307-130 Public disclosure. (1) The department shall make available for public inspection any executive summary or annual progress report submitted to the department. Any hazardous substance user or hazardous waste gen-

erator required to prepare an executive summary or annual progress report, who believes that disclosure of any information contained in the executive summary or annual progress report may adversely affect the competitive position of the user or generator, may request the department under RCW 43.21A.160 to delete from the public record those portions of the executive summary or annual progress report that may affect the user's or generator's competitive position. The department may not disclose any information contained in an executive summary or annual progress report pending a determination of whether the department will delete any information contained in the report from the public record. This determination will be made within sixty days following a request for public inspection.

(2) Any ten persons residing within ten miles of a hazardous substance user or hazardous waste generator required to prepare a plan may file with the department a petition requesting the department to examine a plan to determine its adequacy. The department shall report its determination of adequacy to the petitioners and to the user or generator within a reasonable time. The department may deny a petition if the department has, within the previous year, determined the plan of the user or generator named in the petition to be adequate.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-130, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-130, filed 4/1/91, effective 5/2/91.]

WAC 173-307-140 Records. The department shall maintain a record of each plan, executive summary, or annual progress report it reviews, and a list of all plans, executive summaries, or annual progress reports the department has determined to be inadequate, including descriptions of corrective actions taken. This information must be made available to the public.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-140, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-140, filed 4/1/91, effective 5/2/91.]

Chapter 173-308 WAC
BIOSOLIDS MANAGEMENT

WAC

WAC 173-308-010 Authority and purpose. (1) **Authority.** This chapter is adopted under the authority of chapters 70.95J and 70.95 RCW.

(2) **Purpose.**

(a) The purpose of this chapter is to protect human health and the environment when biosolids are applied to the land. This chapter encourages the maximum beneficial use of biosolids, and is intended to conform to all applicable federal rules adopted under the Federal Clean Water Act as it existed on February 4, 1987.

(b) This chapter establishes permitting requirements for treatment works treating domestic sewage that engage in applicable biosolids treatment or management practices, including any person, site, or facility that has been designated as a treatment works treating domestic sewage.

(c) This chapter establishes standards for the treatment, quality, and management of municipal sewage sludge and domestic septage that are directly enforceable, and that allow these materials to be classified and managed as biosolids.

(d) This chapter establishes requirements, standards, management practices, and monitoring, recordkeeping and reporting requirements that are applicable when biosolids are applied to the land and when municipal sewage sludge is disposed in a municipal solid waste landfill unit as defined in WAC 173-351-100.

(e) This chapter establishes fees for permits issued to facilities that engage in applicable biosolids management activities.

Fees under WAC 173-308-320 do not apply to persons whose activity is limited to pumping, hauling, temporarily storing, or delivering septage or biosolids to other facilities or land application sites, if:

(i) They do not engage in the treatment of the septage or biosolids;

(ii) They have not been designated as a treatment works treating domestic sewage; and

(iii) The generating and receiving facility or land application site is in compliance with the requirements of WAC 173-308-310.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-010, filed 2/18/98, effective 3/21/98.]

WAC 173-308-020 Applicability. (1) Unless otherwise specified in this chapter, these rules apply to the following:

(a) A person who prepares biosolids;

(b) A person who stores biosolids;

(c) A person who applies biosolids to the land;

(d) Biosolids that are applied to the land;

(e) The land where biosolids are applied;

(f) The owner and lease-holder of land where biosolids are applied;

(g) A person who disposes of municipal sewage sludge in a municipal solid waste landfill;

(h) Municipal sewage sludge that is disposed of in a municipal solid waste landfill.

(2) This chapter does not apply to the following municipal sewage sludge and biosolids management facilities and practices:

(a) The firing of municipal sewage sludge in an incinerator.

(b) The placing or disposal of municipal sewage sludge or biosolids in facilities other than municipal solid waste landfills.

(3) Except as provided in (a) and (g) of this subsection, the following solid wastes are not regulated under this chapter:

(a) Sludge generated at an industrial facility during the treatment of industrial wastewater, including sewage sludge generated during the treatment of industrial wastewater combined with domestic sewage; sludge generated at an industrial facility during the treatment of only domestic sewage is considered municipal sewage sludge subject to the requirements of this chapter.

(b) Sewage sludge determined to be hazardous in accordance with chapter 70.105 RCW or rules adopted thereunder.

(c) Sewage sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(d) Ash generated during the firing of municipal sewage sludge or biosolids in an incinerator.

(e) Grit or screenings generated during preliminary treatment of domestic sewage in a treatment works.

(f) Sludge generated during the treatment of either surface water or ground water used for drinking water.

(g) Commercial septage, industrial septage, or a mixture of domestic septage and commercial or industrial septage; on a case-by-case basis, on request of the person who applies septage to the land or at the department's discretion, the department may designate the septage in this subsection (3)(g) as septage that is domestic in quality, and require the septage to be managed in accordance with the provisions of this chapter.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-020, filed 2/18/98, effective 3/21/98.]

WAC 173-308-030 Relationship to other regulations. In addition to the requirements of this chapter, other laws, regulations, and ordinances may also apply to biosolids. These include but are not limited to the following:

(1) Commercial fertilizers are subject to regulation by the Washington state department of agriculture. The following statutes and rules apply to biosolids meeting the definition of a commercial fertilizer under chapter 15.54 RCW:

(a) Chapter 15.54 RCW - Fertilizers, minerals, and limes; and chapter 16-200 WAC - rules relating to fertilizers, minerals and limes, including requirements for labeling, licensing, and registration;

(b) Chapter 19.94 RCW - Weights and measures; and chapter 16-666 WAC - Weights and measures—Packaging and labeling regulations.

(2) Except as required in WAC 173-308-100, the transportation of biosolids or municipal sewage sludge is subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW.

(3) Facilities required to obtain permits under WAC 173-308-310 must comply with the requirements in chapter 43.21C RCW and the State Environmental Policy Act rules adopted under chapter 197-11 WAC. Public notice and hearing requirements under the State Environmental Policy Act may be coordinated with the similar requirements of this chapter.

(4) Biosolids facilities and sites where biosolids are applied to the land must comply with other applicable federal, state and local laws including zoning and land use requirements. Enforcement of other laws and regulations is the responsibility of the agency with jurisdiction.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-030, filed 2/18/98, effective 3/21/98.]

WAC 173-308-040 Direct enforceability. All persons and facilities subject to the requirements of this chapter must comply with these rules on the effective date of the applicable regulation, regardless of whether or not a permit has been issued under WAC 173-308-310.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-040, filed 2/18/98, effective 3/21/98.]

WAC 173-308-050 Delegation of authority. (1) Upon the request of a local health department, the department may delegate authority to implement and assist in the administration of appropriate portions of this chapter.

Delegation must be consistent with any applicable state-EPA agreement regarding delegation of federal biosolids program authority.

(2) Method of delegation.

(a) Delegation will be accomplished through an instrument of mutual consent that is acceptable to both the department and the local health department seeking delegation.

(b) The department may revoke part or all of a delegation of authority under this section if it finds that a local health department has failed to adequately carry out any portion of a delegated responsibility.

(c) As an alternative to revocation of local delegation under (b) of this subsection, the department may correct any deficiencies in a locally approved state permit element by implementing the requirements of this chapter in a separate state approved land application plan or permit. In such case the requirements of the state plan or permit will be in addition to or take precedent over local requirements.

(3) Contents of delegation agreements. At a minimum, delegation agreements must specify the authorities and responsibilities that are being delegated to a local health department. Other authorities and responsibilities are assumed to be retained by the department.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-050, filed 2/18/98, effective 3/21/98.]

WAC 173-308-060 Biosolids not classified as solid waste. (1) The state of Washington recognizes biosolids as a valuable commodity. Biosolids are not solid waste and are not subject to regulation under solid waste laws.

(2) Municipal sewage sludge or septage that fails to meet standards for classification as biosolids is a solid waste, and may not be applied to the land.

(3) Municipal sewage sludge or septage that will be disposed in a landfill is a solid waste.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-060, filed 2/18/98, effective 3/21/98.]

WAC 173-308-070 Use of term, "biosolids"—Explanation. Biosolids is a term adopted in state statute to distinguish municipal sewage sludge that is suitable for land application from that which is not. Under state law biosolids includes both municipal sewage sludge and septage that meet applicable criteria. Federal rules do not use the term "biosolids," and rely instead on the term "sewage sludge," which under the federal system includes domestic septage. Some federal guidance documents do use the term biosolids. Unless the context requires otherwise, biosolids is the term used in this chapter to refer to municipal sewage sludge or septage that has been or is being treated to meet standards so that it can be applied to the land. Material that will be disposed in a landfill is considered municipal sewage sludge. When the term septage is used, the reference is exclusively to septage.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-070, filed 2/18/98, effective 3/21/98.]

WAC 173-308-080 Definitions. Unless the department determines that the context of the rule requires otherwise, the following definitions are applicable for the purposes of this chapter.

"Administrator" means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

"Aerobic digestion" is the biochemical decomposition of organic matter in biosolids into carbon dioxide and water by microorganisms in the presence of air. Aerobic digestion does not include composting.

"Agricultural land" is land on which a food crop, feed crop, or fiber crop is grown. This includes range land and land used as pasture.

"Agronomic rate" is the whole biosolids application rate (dry weight basis) that will provide the amount of nitrogen required for optimum growth of vegetation, and that will not result in the violation of applicable standards or requirements for the protection of ground or surface water as established under chapter 90.48 RCW and related rules including chapters 173-200 and 173-201 WAC.

"Anaerobic digestion" is the biochemical decomposition of organic matter in biosolids into methane gas and carbon dioxide by microorganisms in the absence of air. Anaerobic digestion does not include composting.

"Annual pollutant loading rate" is the maximum amount of a pollutant that can be applied to a unit area of land during a three hundred sixty-five-day period.

"Annual whole biosolids application rate" is the maximum amount of biosolids (dry weight basis) that can be applied to a unit area of land during a three hundred sixty-five-day period.

"Apply biosolids or biosolids applied to the land" means the land application of biosolids for the purpose of beneficial use.

"Beneficial use facility" means a site or sites where biosolids are applied to the land for beneficial use, which has been permitted as a treatment works treating domestic sewage in accordance with the provisions of WAC 173-308-310, and that has been designated as a beneficial use facility through the permitting process.

"Beneficial use of biosolids" means the application of biosolids to the land for the purposes of improving soil characteristics including tilth, fertility, and stability and enhancing the growth of vegetation consistent with protecting human health and the environment.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all applicable requirements under this chapter. Biosolids includes a material derived from biosolids, and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under this chapter. For the purposes of this rule, semisolid products include biosolids or products derived from biosolids ranging in character from mostly liquid to fully dried solids.

"Bulk biosolids" means biosolids that are not sold or given away in a bag or other container for application to the land.

"Ceiling concentration" means the maximum concentration of a pollutant in any biosolids sample, beyond which level the biosolids would be classified as municipal sewage sludge not suitable for application to the land. Ceiling concentrations are established in Table 1 of WAC 173-308-160.

"Class I biosolids management facility" is any publicly owned treatment works (POTW), as defined in 40 CFR 501.2, required to have an approved pretreatment program under 40 CFR 403.8(a) (including any POTW located in a state that has elected to assume local program responsibilities under 40 CFR 403.10(e)), and any treatment works treating domestic sewage, as defined in 40 CFR 122.2, classified as a Class I biosolids management facility by the EPA Regional Administrator, or in the case of approved state programs, the Regional Administrator in conjunction with the state director, because of the potential for its biosolids use or disposal practice to affect public health and the environment adversely.

"Clean Water Act" or **"CWA"** means the Clean Water Act or Federal Clean Water Act (FCWA) (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-117, and Public Law 100-4.

"Composting" means the controlled biological degradation of organic solid waste yielding a product for use as a soil conditioner. This does not include the treatment of sewage sludge in a digester at a wastewater treatment plant.

"Cumulative pollutant loading rate" is the maximum amount of a pollutant that can be applied to an area of land from biosolids that exceed the pollutant concentration limits established in Table 3 of WAC 173-308-160.

"Density of microorganisms" is the number of microorganisms per unit mass of total solids (dry weight) in the biosolids.

"Department" means the Washington state department of ecology and, within the scope of its delegation, a local health department that has been delegated authority under WAC 173-308-050.

"Director" means the director of the department of ecology or his or her authorized representative.

"Disposal on an emergency basis" means a period up to but not exceeding one year. Generally, emergency situations requiring the use of disposal facilities will normally occur as a result of inclement weather conditions at a beneficial use site, contractual or technical difficulties in the treatment, transportation, or application of the biosolids, or as a result of short term economic or administrative barriers, any and all of which are expected to be resolved within a period of one year.

"Disposal on a long-term basis" means to adopt disposal as a preferred method of management for at least five years, or for an indefinite period of time with no expectation for pursuing other management alternatives.

"Disposal on a temporary basis" means a period of more than one but less than five years. Generally, situations requiring the temporary use of disposal facilities will normally occur as a result of deficiencies in the wastewater or biosolids treatment process, or economic, administrative, or contractual constraints which cannot be resolved in less than one year.

"Domestic septage" means domestic septage - Class I, Class II, or Class III as defined in this section.

"Domestic septage - Class I" is liquid or solid material removed from domestic septic tanks, cess pools, or similar treatment works that receive only domestic sewage, and that has had a sufficiently long residency time to be considered largely stabilized. For the purposes of managing mixed loads or batches of septage, a load or batch is considered Class I if it does not exceed twenty-five percent by volume of Class II domestic septage or twenty-five percent by volume of restaurant grease trap waste, unless otherwise approved by the regulatory authority.

"Domestic septage - Class II" is liquid or solid material removed from portable toilets, type III marine sanitation devices, vault toilets, pit toilets, RV holding tanks or other similar holding systems that receive only domestic sewage.

"Domestic septage - Class III" is liquid or solid material removed from domestic septic tanks, cess pools, or similar treatment works that receive sewage from commercial or industrial sources, but which the department has determined to be domestic in quality under WAC 173-308-020 (3)(g).

"Domestic septage managed as biosolids originating from municipal sewage sludge" means domestic septage managed as if it had originated from a sewage treatment process at a publicly owned treatment works.

"Domestic sewage" is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

"Dry weight basis" means calculated on the basis of having been dried at 105°C until reaching a constant mass (i.e., essentially one hundred percent solids content).

"EPA" means the United States Environmental Protection Agency.

"Exceptional quality biosolids" means biosolids that meet the pollutant concentration limits in Table 3 of WAC 173-308-160, the Class A pathogen reduction requirements in one of WAC 173-308-170 (2)(a) through (f), and the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7).

"Facility" means a treatment works treating domestic sewage as defined in this chapter, unless the context of the rule requires otherwise. For the purposes of this chapter a facility is considered to be new if it has not been previously approved for the treatment, storage, use, or disposal of biosolids.

"Feed crops" are crops produced primarily for consumption by animals.

"Fiber crops" are crops such as flax and cotton, including but not limited to those whose parts or by-products may be consumed by humans or used in the production or preparation of food for human consumption.

"Food crops" are crops consumed by humans. These include, but are not limited to, fruits, vegetables, grains, and tobacco.

"Forest" is an area of land that is managed for the production of timber or other forest products, or for benefits such as recreation and watershed protection, and that is or will be dominated by trees under the current system of management. For the purposes of this rule, other areas of land that are not regulated as agricultural land, public contact sites, land reclamation sites, or lawns or home gardens are considered forestland.

"General permit," for the purposes of this chapter, means a permit issued by the department in accordance with the procedures established in this chapter or in chapter 173-226 WAC, to be effective in a designated geographical area, that authorizes the application of biosolids to the land or the disposal of biosolids in a municipal solid waste landfill, under which multiple treatment works treating domestic sewage may apply for coverage.

"Geometric mean" means the antilogarithm of the arithmetic average of the logarithms of the sample values, or the nth root of the product of n sample values.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"Health department" or "local health department" means city, county, city-county, or district public health department as defined in chapters 70.05, 70.08, and 70.46 RCW.

"Individual permit," for the purposes of this chapter, means a permit issued by the department to a single treatment works treating domestic sewage in accordance with WAC 173-308-310, which authorizes the application of biosolids to

the land or the disposal of biosolids in a municipal solid waste landfill.

"Industrial wastewater" is wastewater generated in a commercial or industrial process.

"Land application" is the application of biosolids to the land surface by means such as spreading or spraying; the injection of biosolids below the land surface; or the incorporation of biosolids into the soil, for the purpose of beneficial use.

"Land with a low potential for public exposure" is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

"Land with a high potential for public exposure" is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

"Local health department" see definition of health department.

"Monthly average" is the arithmetic mean of all measurements taken during the month.

"Municipal sewage sludge" means sewage sludge generated from a publicly owned treatment works. For the purposes of this chapter, sewage sludge generated from the treatment of only domestic sewage in a privately owned or industrial treatment facility is considered municipal sewage sludge.

"Municipality" means a city, town, borough, county, parish, district, association, or other public body (including an inter-municipal agency of two or more of the foregoing entities) created by or under state law; or a designated and approved management agency under section 208 of the Clean Water Act, as amended. The definition includes a special district created under state law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the Clean Water Act, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of biosolids.

"Other container" is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

"Owner" means any person with ownership interest in a site or facility, or who exercises control over a site or facility, but does not include a person who, without participating in management of the site or facility, holds indicia of ownership primarily to protect the person's security interest.

"Pasture" is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

"Pathogenic organisms" are disease causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

"Permit" means an authorization, license, or equivalent control document issued by the director to implement the requirements of this chapter.

"Person" is an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

"Person who prepares biosolids" is either the person who generates biosolids during the treatment of domestic sewage in a treatment works or the person who derives a material from biosolids.

"pH" means the logarithm of the reciprocal of the hydrogen ion concentration.

"Place sewage sludge" or **"sewage sludge placed"** means to dispose of sewage sludge.

"Pollutant" is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

"Pollutant limit" is a numerical value that describes the amount of a pollutant allowed per unit amount of biosolids (e.g., milligrams per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (e.g., kilograms per hectare); the volume of a material that can be applied to a unit area of land (e.g., gallons per acre); or the number of pathogens or indicator organisms per unit of biosolids. Pollutant limits are established in Tables 1 - 4 of WAC 173-308-160, in 173-308-170, and in 173-308-270.

"Public contact site" is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

"Publicly owned treatment works" means a treatment works treating domestic sewage that is owned by a municipality, the state of Washington, or the federal government.

"Range land" is generally open, uncultivated land dominated by herbaceous or shrubby vegetation that may be used for grazing or browsing, either by wildlife or livestock.

"Receiving-only facility" means a treatment works treating domestic sewage that only receives municipal sewage sludge or biosolids from other sources for further treatment and/or application to the land, and which does not generate any biosolids from the treatment of domestic sewage.

"Reclamation site" is drastically disturbed land that is reclaimed using biosolids. This includes, but is not limited to, strip mines and construction sites.

"Residential equivalent value" means the number of residential equivalents determined for a facility under chapter 173-224 WAC or a value similarly obtained under WAC 173-308-320.

"Restrict public access" means to minimize access of nonessential personnel to land where biosolids are applied, through the use of natural or artificial barriers, signs, remoteness, or other means.

"Saturated zone" means the zone below the water table in which all interstices are filled with water.

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

"Significant change in biosolids management practices" means a change in the quality of biosolids that are applied to the land, either from class A to class B for pathogens, or from Table 3 to Table 1 of WAC 173-308-160 for pollutant limits; the addition of a new area to which biosolids will be applied, which was not previously disclosed during a required public notice process; for class B biosolids only, a change from nonfood crops to food crops, a change from crops where the harvestable portions do not contact the biosolids/soil mixture to crops where the harvestable portion contacts the biosolids/soil mixture, or a change in site classification from land with a low potential for public exposure to land with a high potential for public exposure; or any change or deletion of a requirement established in an approved land application plan or established as a condition of coverage under a permit that would result in a decrease in buffer size, site monitoring, or facility reporting requirements, which was not otherwise provided for in the permit or plan approval process.

"Significantly remove or reduce recognizable materials" means to remove recognizable debris from biosolids by means such as screening, or to reduce the number of recognizable items in biosolids by means such as grinding, to a level that in the opinion of the department, will not result in an aesthetic nuisance or physical hazard when biosolids are applied to the land.

"Site" means all areas of land, including buffer areas, which are identified in the scope of an approved site specific land application plan. A site is considered to be new or expanded when biosolids are applied to an area not approved in a site specific land application plan or that was not previously disclosed during a required public notice process.

"Specific oxygen uptake rate (SOUR)" is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the biosolids.

"State" means the state of Washington.

"Store or storage of biosolids" is the placing of biosolids on land on which the biosolids remain for two years or less. This does not include the placing of biosolids on land for treatment or disposal.

"Stover" is the nongrain, above-ground part of a grain crop, often corn or sorghum.

"Surface waters of the state" means surface waters of the state as defined in WAC 173-201A-020.

"Total solids" are the materials in biosolids that remain as residue when the biosolids are dried at 103 to 105°C.

"Treat or treatment of biosolids" is the preparation of biosolids for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of biosolids. This does not include storage of biosolids.

"Treatment works" is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

"Treatment works treating domestic sewage" means a publicly owned treatment works or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage or sewage sludge, including land dedicated for the disposal of sewage sludge. Treatment works treating domestic sewage also includes a beneficial use facility that has been permitted in accordance with the provisions of WAC 173-308-310, and a person, site, or facility designated as a treatment works treating domestic sewage in accordance with WAC 173-308-310 (1)(b). This definition does not include septic tanks or similar devices, but may include persons or vehicles that service septic systems and centralized septage facilities that are designated as a treatment works treating domestic sewage or are applicable under this definition.

"Unstabilized solids" are organic materials in biosolids that have not been treated in either an aerobic or anaerobic treatment process.

"Vector attraction" is the primarily odorous characteristic of biosolids that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

"Volatile solids" is the amount of the total solids in biosolids that are lost when the biosolids are combusted at 550°C in the presence of excess air.

"Waters of the state" means waters of the state as defined in RCW 90.48.020.

"Wetlands" means those areas that are inundated or saturated by surface water or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-080, filed 2/18/98, effective 3/21/98.]

WAC 173-308-090 Requirement for a person who prepares biosolids. Any person who prepares biosolids must ensure that the applicable requirements in this chapter and any applicable permit issued under this chapter are met when the biosolids are applied to the land.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-090, filed 2/18/98, effective 3/21/98.]

WAC 173-308-100 Requirement for a person who transports biosolids. (1) Any person who transports biosolids must ensure that the transportation vehicle is properly cleaned prior to use of the vehicle for the transportation of food crops, feed crops, or fiber crops.

(2) The transportation of biosolids is otherwise subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW and WAC 173-308-030(2).

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-100, filed 2/18/98, effective 3/21/98.]

WAC 173-308-110 Requirement for a person who applies biosolids. A person may not apply biosolids to the land except in accordance with applicable requirements of this chapter and any applicable permit issued under this chapter.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-110, filed 2/18/98, effective 3/21/98.]

WAC 173-308-120 Requirement to obtain and provide information. (1) It is a violation of the provisions of this chapter for any person to falsify a certification or statement that is required by these rules or to make any required certification or statement under false pretense.

(2) Any person who applies biosolids to the land must obtain information needed to comply with the requirements of this chapter.

(3) The person who prepares biosolids must provide the person who applies biosolids to the land with notice and necessary information to comply with the requirements of this chapter, including sufficient information on the concentration and types of nutrients in the biosolids needed to determine an agronomic rate for the crop under management.

(4) When a person who prepares biosolids provides the biosolids to another person who further prepares the biosolids, the person who provides the biosolids must provide the person who receives the biosolids notice and necessary information to comply with the requirements of this chapter.

(5) The person who applies bulk biosolids to the land must provide the owner or lease holder of the land on which the bulk biosolids are applied notice and necessary information to comply with the requirements of this chapter.

(6) The person who applies bulk biosolids to the land must obtain written approval of the landowner prior to applying biosolids to the land for the first time, when the bulk biosolids do not meet the criteria to be classified as exceptional quality.

(7) All persons required to keep and maintain records under any provision of this chapter must provide access to those records during normal business hours to a representative of the department, a local health department, or the United States EPA, and to the owner, lessor, lessee or other person with a legal management interest in the land on which the biosolids are applied, at the location where the records are kept.

(8) Any facility, including a beneficial use facility, must immediately notify all sources from which it receives biosolids, if at any time it becomes unsuitable for the purpose of receiving biosolids from those other sources.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-120, filed 2/18/98, effective 3/21/98.]

WAC 173-308-130 Additional or more stringent requirements. On a case-by-case basis, the department may impose requirements for the beneficial use of biosolids that are in addition to or more stringent than the requirements in this chapter if the department believes that the additional or more stringent requirements are necessary to protect public health and the environment from any adverse effect of a pollutant in the biosolids.

(1) In addition to other considerations, failure of a generator, applier, or landowner to conform to any applicable requirements of this chapter may be cause to impose additional or more stringent requirements.

(2) The department will impose any additional or more stringent requirements under WAC 173-308-130 in a permit issued to the applicable facility.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-130, filed 2/18/98, effective 3/21/98.]

WAC 173-308-140 Biosolids sampling and analysis methods. (1) **Sampling.** Samples that are collected and analyzed must be representative of the biosolids that are applied to the land.

(2) **Analysis methods.** The publications listed in this subsection are incorporated by reference in this chapter. Methods in the publications listed below must be used to analyze samples of biosolids unless other methods are approved in writing by the department. These publications are available for review during normal working hours at the Washington State Department of Ecology headquarters located at 300 Desmond Drive in Olympia, Washington.

(a) For enteric viruses use ASTM Designation: D 4994-89, "*Standard Practice for Recovery of Viruses From Wastewater Sludges,*" 1992 Annual Book of ASTM Standards: Section 11-Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

(b) For fecal coliform use part 9221 E. or part 9222 D., "*Standard Methods for the Examination of Water and Wastewater,*" 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005.

(c) For helminth ova use Yanko, W.A., "*Occurrence of Pathogens in Distribution and Marketing Municipal Sludges,*" EPA 600/1-87-014, 1987. National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 (PB 88-154273/AS).

(d) For inorganic pollutants use, "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,*" EPA Publication SW-846, Second Edition (1982) with Updates I (April 1984) and II (April 1985) and Third Edition (November 1986) with Revision I (December 1987). Second Edition and Updates I and II are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 (PB 87-190-291). Third Edition and Revision I are available from Superintendent of Documents, Government Printing Office, 941 North Capitol Street NE, Washington, DC 20002 (Document Number 955-001-00000-1).

For the analysis of nitrogen and other nutrients the department may specify additional analytical references that are acceptable.

(e) For salmonella sp. bacteria use part 9260 D., "*Standard Methods for the Examination of Water and Wastewater,*" 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005; or Kenner, B.A. and H.P. Clark, "Detection and enumeration of Salmonella and Pseudomonas aeruginosa," Journal of the Water Pollution Control Federation, Vol. 46, no. 9, Septem-

ber 1974, pp. 2163-2171. Water Environment Federation, 601 Wythe Street, Alexandria, VA 22314.

(f) For specific oxygen uptake rate (SOUR) use part 2710 B., "*Standard Methods for the Examination of Water and Wastewater,*" 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005.

(g) For total, fixed, and volatile solids use part 2540 G., "*Standard Methods for the Examination of Water and Wastewater,*" 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-140, filed 2/18/98, effective 3/21/98.]

WAC 173-308-150 Frequency of biosolids monitoring. The person who prepares biosolids is responsible for ensuring that monitoring is carried out in accordance with the requirements of this chapter and any applicable permit. The minimum frequency of monitoring for the pollutants listed in Tables 1, 2, 3 and 4 of WAC 173-308-160; the pathogen density requirements in WAC 173-308-170; and the vector attraction reduction requirements in WAC 173-308-180, is prescribed in subsection (3) of this section;

(1) The frequency of monitoring required by this section is based on the dry weight tonnage of bulk biosolids applied to the land per three hundred sixty-five-day period, or the dry weight tonnage of biosolids received per three hundred sixty-five-day period by a person who prepares biosolids that are sold or given away for application to the land.

(2) After the biosolids have been monitored for two years at the frequency in subsection (3) of this section, the person who prepares the biosolids may request the department to reduce the frequency of monitoring for pollutant concentrations, and for the pathogen density requirements in WAC 173-308-170 (2)(c)(ii) and (iii). The frequency of monitoring must not be less than once per year when biosolids are applied to the land.

(3) MINIMUM FREQUENCY OF MONITORING

Metric tons (U.S. tons) per 365-day period	Frequency
Greater than zero but less than 290 (320)	once per year
Equal to or greater than 290 (320) but less than 1,500 (1,653)	once per quarter (four times per year)
Equal to or greater than 1,500 (1,653) but less than 15,000 (16,535)	once per 60 days (six times per year)
Equal to or greater than 15,000 (16,535)	once per month (12 times per year)

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-150, filed 2/18/98, effective 3/21/98.]

WAC 173-308-160 Biosolids pollutant limits. This section sets pollutant concentration limits, and annual and cumulative pollutant loading rate limits for biosolids that are applied to the land.

(1) Table 1 of this section sets the maximum allowable concentration (ceiling limit) of pollutants in biosolids that are applied to the land.

Municipal sewage sludge that contains any pollutant listed in Table 1 of this section at a concentration greater than the allowable ceiling limit is not biosolids, is a solid waste, and may not be applied to the land.

(2) Table 2 of this section sets the maximum quantities of pollutants that may be added to an area of land, also referred to as the cumulative pollutant loading rate. The cumulative pollutant loading rates in Table 2 apply when the concentration of any pollutant in biosolids that are applied to the land exceeds the allowable pollutant concentration limit in Table 3 of this section.

(a) A person may not apply bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section to a land application site, if any of those rates have been reached on the site.

(b) Before bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section are applied to the land, the person who proposes to apply the bulk biosolids must contact the local health department and the department to determine whether bulk biosolids subject to the cumulative pollutant loading rates were applied to the site before the effective date of this chapter.

(i) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site since that date is known, in addition to any amount subtracted in (b)(iii) of this subsection, the amount previously applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(ii) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the bulk biosolids since that date is not known, additional biosolids subject to the cumulative pollutant loading rates in Table 2 of this section may not be applied to the site.

(iii) If bulk biosolids were applied to the site prior to July 20, 1993, and the cumulative amount of each pollutant applied to the site prior to that date can be determined, in addition to any amount subtracted in (b)(i) of this subsection, the amount applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(iv) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have not been applied to the site, the cumulative amount of each pollutant listed in Table 2 of this section may be applied to the site.

(v) Any person who applies bulk biosolids to the land, which are subject to the cumulative pollutant loading rates in Table 2 of this section, must provide written notice prior to the initial application of bulk biosolids to the land. Notice must be submitted to the department, and to any local health department in whose jurisdiction the biosolids will be applied. The department and the local health department must

retain and provide access to the notice. The notice must include:

(A) The location, by street address if applicable, a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and the section, township and range of each quarter section on which biosolids are applied; and

(B) The name, address, telephone number, and National Pollutant Discharge Elimination System or state waste discharge permit number and state biosolids permit number (if applicable) of the person who prepared the biosolids and also of the person who applies (if applicable) the bulk biosolids.

(3) Table 3 of this section sets a lower pollutant concentration threshold which, when achieved, relieves the person who prepares biosolids and the person who applies biosolids, from certain requirements related to recordkeeping, reporting, and labeling.

(4) Table 4 of this section sets annual pollutant loading rates used to derive an annual whole biosolids application rate. Table 4 is applicable only when biosolids that are sold or given away in a bag or other container for application to the land exceed any of the pollutant concentration limits in Table 3 of this section. The person who prepares the biosolids must provide information on compliance with this requirement on a label or information sheet as required under WAC 173-308-260 (1)(b)(ii) and (4)(b).

TABLE 1 - CEILING CONCENTRATION LIMITS

POLLUTANT	CEILING CONCENTRATION*
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7500

*** Milligrams per kilogram - dry weight basis**

TABLE 2 - CUMULATIVE POLLUTANT LOADING RATES

POLLUTANT	CUMULATIVE POLLUTANT LOADING RATE*
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

*** Kilograms per hectare - dry weight basis**

TABLE 3 - POLLUTANT CONCENTRATION LIMITS

POLLUTANT	LIMIT*
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

*** Monthly average concentration in milligrams per kilogram - dry weight basis**

TABLE 4 - ANNUAL POLLUTANT LOADING RATES

POLLUTANT	ANNUAL POLLUTANT LOADING RATE*
Arsenic	2.0
Cadmium	1.9
Copper	75
Lead	15
Mercury	0.85
Nickel	21
Selenium	5.0
Zinc	140

*** Kilograms per hectare per 365 day period**

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-160, filed 2/18/98, effective 3/21/98.]

WAC 173-308-170 Pathogen reduction. (1) This section contains the requirements for biosolids to be classified either Class A or Class B with respect to pathogens.

(a) The requirements in subsection (2)(a)(i) and (ii), or (b)(i) and (ii), or (c)(i), (ii), and (iii), or (d)(i), (ii) and (iii), or (e)(i) and (ii), or (f)(i) and (ii) of this section must be met for biosolids to be Class A for pathogens.

(b) The Class A pathogen requirements must be met at the same time or before the vector attraction reduction requirements in WAC 173-308-180 (2), (3), or (4).

(c) The requirements in subsection (3)(a), (b), or (c) of this section must be met for biosolids to be Class B for pathogens.

(2) **Biosolids - Class A.**

(a) Class A - Alternative 1.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The time and temperature requirements in (a)(ii)(A), (B), (C), or (D) of this subsection must be met.

(A) When the percent solids of the biosolids is seven percent or higher, the temperature of the biosolids must be 50°C

or higher; the time period must be twenty minutes or longer; and the temperature and time period must be determined using equation (1), except when small particles of biosolids are heated by either warmed gases or an immiscible liquid;

$$D = \frac{131{,}700{,}000}{10^{0.1400t}} \quad \text{Equation (1)}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

(B) When the percent solids of the biosolids is seven percent or higher and small particles of biosolids are heated by either warmed gases or an immiscible liquid, the temperature of the biosolids must be 50°C or higher; the time period must be fifteen seconds or longer; and the temperature and time period must be determined using equation (1);

(C) When the percent solids of the biosolids is less than seven percent and the time period is at least fifteen seconds, but less than thirty minutes, the temperature and time period must be determined using equation (1);

(D) When the percent solids of the biosolids is less than seven percent; the temperature of the biosolids is 50°C or higher; and the time period is thirty minutes or longer, the temperature and time period must be determined using equation (2).

$$D = \frac{50{,}070{,}000}{10^{(0.1400t)}} \quad \text{Equation (2)}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

(b) Class A - Alternative 2.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The pH of the biosolids that are used must be raised to above twelve and remain above twelve for seventy-two hours; and

(A) The temperature of the biosolids must be above 52°C for twelve hours or longer during the period that the pH of the biosolids is above twelve; and

(B) At the end of the seventy-two-hour period during which the pH of the biosolids is above twelve, the biosolids must be air dried to achieve a percent solids in the biosolids greater than fifty percent.

(c) Class A - Alternative 3.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The biosolids must be analyzed prior to pathogen treatment to determine whether the biosolids contain enteric viruses; and

(A) When the density of enteric viruses in the biosolids prior to pathogen treatment is less than one plaque-forming unit per four grams of total solids (dry weight basis), the biosolids are Class A with respect to enteric viruses until the next monitoring episode for the biosolids; or

(B) When the density of enteric viruses in the biosolids prior to pathogen treatment is equal to or greater than one plaque-forming unit per four grams of total solids (dry weight basis), the biosolids are Class A with respect to enteric viruses when the density of enteric viruses in the biosolids after pathogen treatment is less than one plaque-forming unit per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the biosolids that meets the enteric virus density requirement are documented.

(C) After the enteric virus reduction in (c)(ii)(B) of this subsection is demonstrated for the pathogen treatment process, the biosolids continue to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented.

(iii) The biosolids must be analyzed prior to pathogen treatment to determine whether the biosolids contains viable helminth ova; and

(A) When the density of viable helminth ova in the biosolids prior to pathogen treatment is less than one per four grams of total solids (dry weight basis), the biosolids are Class A with respect to viable helminth ova until the next monitoring episode for the biosolids; or

(B) When the density of viable helminth ova in the biosolids prior to pathogen treatment is equal to or greater than one per four grams of total solids (dry weight basis), the biosolids are Class A with respect to viable helminth ova when the density of viable helminth ova in the biosolids after pathogen treatment is less than one per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the biosolids that meets the viable helminth ova density requirement are documented.

(C) After the viable helminth ova reduction in (c)(iii)(B) of this subsection is demonstrated for the pathogen treatment process, the biosolids continues to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented.

(d) Class A - Alternative 4.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for

application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The density of enteric viruses in the biosolids must be less than one plaque-forming unit per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, unless otherwise specified by the department; and

(iii) The density of viable helminth ova in the biosolids must be less than one per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, unless otherwise specified by the department.

(e) Class A - Alternative 5.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The biosolids must be treated in one of the processes to further reduce pathogens described in (e)(ii)(A) through (G) of this subsection.

(A) Composting.

(I) Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the biosolids must be maintained at 55°C or higher for three days.

(II) Using the windrow composting method, the temperature of the biosolids must be maintained at 55°C or higher for fifteen days or longer. During the period when the compost is maintained at 55°C or higher, there must be a minimum of five turnings of the windrow.

(B) Heat drying. Biosolids must be dried by direct or indirect contact with hot gases to reduce the moisture content of the biosolids to ten percent or less. Either the temperature of the biosolids particles must exceed 80°C or the wet bulb temperature of the gas in contact with the biosolids as the biosolids leaves the dryer must exceed 80°C.

(C) Heat treatment. Liquid biosolids must be heated to a temperature of 180°C or higher for thirty minutes.

(D) Thermophilic aerobic digestion. Liquid biosolids must be agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the biosolids must be at least ten days at 55 to 60°C.

(E) Beta ray irradiation. Biosolids must be irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20°C).

(F) Gamma ray irradiation. Biosolids must be irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (ca. 20°C).

(G) Pasteurization. The temperature of the biosolids must be maintained at 70°C or higher for thirty minutes or longer.

(f) Class A - Alternative 6.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The biosolids must be treated in a process that is equivalent to a process to further reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

(3) **Biosolids - Class B.**

(a) Class B - Alternative 1.

(i) Seven samples of the biosolids must be collected at the time the biosolids are used; and

(ii) The geometric mean of the density of fecal coliform of the samples must be less than 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

(b) Class B - Alternative 2. The biosolids must be treated in one of the processes to significantly reduce pathogens described in (b)(i) through (v) of this subsection.

(i) Aerobic digestion. The biosolids must be agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between forty days at 20°C and sixty days at 15°C.

(ii) Air drying. The biosolids must be dried on sand beds or on paved or unpaved basins. The biosolids must dry for a minimum of three months. During two of the three months, the ambient average daily temperature must be above 0°C.

(iii) Anaerobic digestion. The biosolids must be treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between fifteen days at 35 to 55°C and sixty days at 20°C.

(iv) Composting. Using the within-vessel, static aerated pile, or windrow composting methods, the temperature of the biosolids must be raised to 40°C or higher and remain at 40°C or higher for five days. For four hours during the five days, the temperature in the compost pile must exceed 55°C.

(v) Lime stabilization. Sufficient lime must be added to the biosolids to raise the pH of the biosolids to twelve after two hours of contact.

(c) Class B - Alternative 3. The biosolids must be treated in a process that is equivalent to a process to significantly

reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-170, filed 2/18/98, effective 3/21/98.]

WAC 173-308-180 Vector attraction reduction. (1) When vector attraction reduction is accomplished prior to application of biosolids to the land, the requirements in one of subsections (2) through (7) of this section must be met.

The vector attraction reduction requirements in subsection (2), (3), or (4) of this section must be met at the same time or after the Class A pathogen requirements in WAC 173-308-170.

(2) The mass of volatile solids in the biosolids must be reduced by a minimum of thirty-eight percent (see calculation procedures in *"Environmental Regulations and Technology—Control of Pathogens and Vector Attraction in Sewage Sludge,"* EPA-625/R-92/013, 1992, U.S.EPA, Cincinnati, OH 45268.)

(a) When the thirty-eight percent volatile solids reduction requirement in this subsection (2) cannot be met for anaerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids anaerobically in the laboratory in a bench-scale unit for forty additional days at a temperature between 30 and 37°C. After the forty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than seventeen percent.

(b) When the thirty-eight percent volatile solids reduction requirement in this subsection (2) cannot be met for aerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for thirty additional days at 20°C. After the thirty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than fifteen percent.

(3) The specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process must be less than or equal to 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20°C.

(4) The biosolids must be treated in an aerobic process for fourteen days or longer. During that time, the temperature of the biosolids must be higher than 40°C and the average temperature of the biosolids must be higher than 45°C.

(5) The pH of the biosolids must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for two hours and then at 11.5 or higher for an additional twenty-two hours.

(6) For biosolids that do not contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than seventy-five percent based on the moisture content and total solids prior to mixing with other materials.

(7) For biosolids that contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than ninety percent based on the moisture content and total solids prior to mixing with other materials.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-180, filed 2/18/98, effective 3/21/98.]

WAC 173-308-190 Protecting waters of the state—Agronomic rate requirement. In accordance with water quality standards for ground waters of the state of Washington, chapter 173-200 WAC, biosolids must be applied to the land in a manner approved by the department, and at not greater than agronomic rates unless otherwise specified by the department in accordance with subsection (1) or (2) of this section. Agronomic rate determinations must take into account nitrogen supplied from other sources such as manures and commercial fertilizers as well as biosolids.

(1) Biosolids applied to land reclamation sites may be applied in excess of agronomic rates if approved by the department in a site specific land application plan developed under WAC 173-308-310(6).

(2) For the purposes of furthering necessary research efforts, biosolids may be applied at greater than agronomic rates to limited areas of land if approved by the department in a site specific land application plan developed under WAC 173-308-310(6). In addition to the elements required under WAC 173-308-310(6), the land application plan for a research project must also include:

(a) A research proposal describing the nature of the project, what may be learned, the anticipated benefits, provisions for progress reports and peer review, and interpretation of results;

(b) An explanation for the sizing of the research plot(s). Plot size must not exceed the minimum area required to support the goals of the research; and

(c) A discussion of any potential adverse impacts of application rates in excess of agronomic rates, along with potential mitigation or response to adverse effects if observed.

(3) The person who prepares exceptional quality biosolids that are sold or given away to another person must provide sufficient information to allow the person who receives the biosolids to determine an agronomic rate of application.

(4) The person who applies exceptional quality biosolids to the land is responsible for compliance with the agronomic rate requirement in this section.

(5) When the potential for ground water contamination due to biosolids application exists, the department may require ground water monitoring or other conditions in accordance with WAC 173-200-080. If it is determined that an enforcement criterion may be violated, an evaluation must be conducted to demonstrate compliance with the provisions of WAC 173-200-050 (3)(b)(vi).

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-190, filed 2/18/98, effective 3/21/98.]

WAC 173-308-200 Exemptions based on the exceptional quality of biosolids. (1) The person who prepares and the person who applies biosolids that meet criteria to be clas-

sified as exceptional quality are exempt from the following requirements:

(a) The site management and access restrictions in WAC 173-308-210(4), 173-308-220(4), 173-308-230(4), and 173-308-240(4);

(b) The labeling requirement derived from Table 4 of WAC 173-308-160 for the annual whole biosolids application rate in WAC 173-308-260 (1)(b)(ii);

(c) The requirement in WAC 173-308-120(6) for obtaining prior written approval of the landowner;

(d) The land application plan requirements of WAC 173-308-310(6), except as provided in WAC 173-308-310 (6)(a)(ii) or (iii);

(e) The recordkeeping requirements in WAC 173-308-210 (5)(b), 173-308-220 (5)(b), 173-308-230 (5)(b), and 173-308-240 (6)(b);

(f) The requirements in WAC 173-308-300 (2)(a) and (b) for approved plans when used as a component of intermediate or final cover in a municipal solid waste landfill.

(2) On a case-by-case basis, the director may apply any or all of the site management and access restrictions exempted under WAC 173-308-200 (1)(a) after determining that the requirements are necessary to protect public health and the environment from any adverse effect that may occur from a pollutant in the bulk biosolids.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-200, filed 2/18/98, effective 3/21/98.]

WAC 173-308-210 Bulk biosolids applied to agricultural land. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to agricultural land may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to agricultural land exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to agricultural land must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in subsection (4)(a)(i) through (x) and (b)(i) through (iii) of this section must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to agricultural land must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land;

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (x) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to agricultural land.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(vii) Public access to land with a high potential for public exposure must be restricted for one year after application of biosolids.

(viii) Public access to land with a low potential for public exposure must be restricted for thirty days after application of biosolids.

(ix) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(ix) of this subsection during the period when access is restricted.

(x) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to agricultural land.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department or by EPA with the approval of the department.

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Recordkeeping.**

(a) The person who prepares biosolids for application to agricultural land must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies biosolids that do not meet criteria to be classified as exceptional quality to agricultural land must keep the records required in WAC 173-308-290(4).

(6) **Reporting.** The person who prepares biosolids for application to agricultural land must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-210, filed 2/18/98, effective 3/21/98.]

WAC 173-308-220 Bulk biosolids applied to forestland. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to forestland may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to forestland exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to forestland must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in subsection (4)(a)(i) through (ix) and (b)(i) through (iii) of this section must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to forestland must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land.

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (ix) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to forestland.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Public access to land with a high potential for public exposure must be restricted for one year after application of biosolids.

(vii) Public access to land with a low potential for public exposure must be restricted for thirty days after application of biosolids.

(viii) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(viii) of this subsection during the period when access is restricted.

(ix) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to forestland.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department.

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Recordkeeping.**

(a) The person who prepares biosolids for application to forestland must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies biosolids that do not meet criteria to be classified as exceptional quality to forestland must keep the records required in WAC 173-308-290(4).

(6) **Reporting.** The person who prepares biosolids for application to forestland must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-220, filed 2/18/98, effective 3/21/98.]

WAC 173-308-230 Bulk biosolids applied to a public contact site. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to a public contact site may not exceed the ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to a public contact site exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to a public contact site must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in WAC 173-308-230 (4)(a)(i) through (ix) and (b)(i) through (iii) must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to a public contact site must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land.

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (ix) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to a public contact site.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(vii) Public access must be restricted for one year after application of biosolids.

(viii) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(viii) of this subsection during the period when access is restricted.

(ix) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to a public contact site.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department.

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Recordkeeping.**

(a) The person who prepares bulk biosolids for application to a public contact site must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies bulk biosolids that do not meet criteria to be classified as exceptional quality to a public contact site must keep the records required in WAC 173-308-290(4).

(6) **Reporting.** The person who prepares bulk biosolids for application to a public contact site must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-230, filed 2/18/98, effective 3/21/98.]

WAC 173-308-240 Bulk biosolids applied to a land reclamation site. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to a land reclamation site may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to a land reclamation site exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to a land reclamation site must be Class A for pathogens, or the bulk biosolids must be Class B for pathogens and the site management and access restrictions in subsection (4)(a)(i) through (x) and (b)(i) through (iii) of this section must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to a land reclamation site must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land.

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (x) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to a land reclamation site.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(vii) Public access to land with a high potential for public exposure must be restricted for one year after application of biosolids.

(viii) Public access to land with a low potential for public exposure must be restricted for thirty days after application of biosolids.

(ix) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(ix) of this subsection during the period when access is restricted.

(x) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to a land reclamation site.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department;

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department;

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Application exceeding agronomic rates.** In accordance with WAC 173-308-190 (1) and (5), when biosolids will be applied to a land reclamation site in excess of agronomic rates, the application rate must be approved in a site specific land application plan by the department. The department may require that an evaluation be conducted as specified in WAC 173-200-080. Where it is determined that an enforcement criterion may be violated, the evaluation must be conducted to demonstrate compliance with the provisions of WAC 173-200-050 (3)(b)(vi).

(6) **Recordkeeping.**

(a) The person who prepares biosolids for application to a land reclamation site must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies biosolids that do not meet criteria to be classified as exceptional quality to a land reclamation site must keep the records required in WAC 173-308-290(4).

(7) **Reporting.**

The person who prepares biosolids for application to a land reclamation site must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-240, filed 2/18/98, effective 3/21/98.]

WAC 173-308-250 Bulk biosolids applied to a lawn or home garden. (1) Bulk biosolids that are applied to a lawn or home garden must meet the criteria to be classified as exceptional quality as defined in WAC 173-308-080.

(2) **Recordkeeping.** The person who prepares bulk biosolids for application to a lawn or home garden must keep the records required in WAC 173-308-290 (2) and (3).

(3) **Reporting.** The person who prepares bulk biosolids for application to a lawn or home garden must submit annual reports in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-250, filed 2/18/98, effective 3/21/98.]

WAC 173-308-260 Biosolids sold or given away in a bag or other container. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in biosolids that are sold or given away in a bag or other container may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If biosolids that are sold or given away in a bag or other container exceed the pollutant concentration limits in Table 3 of WAC 173-308-160, then:

(i) The mathematical product of the concentration of each pollutant in the biosolids and the annual whole biosolids application rate for the biosolids must not cause the annual pollutant loading rate for the pollutant in Table 4 of WAC 173-308-160 to be exceeded;

The procedure for determining the annual whole biosolids application rate that complies with the requirement in (b)(i) of this subsection is specified in Appendix A of this chapter.

(ii) The annual whole biosolids application rate as calculated in (b)(i) of this subsection, or the recommended agronomic rate, whichever is less, must be included on the label or information sheet required in WAC 173-308-260(4).

(2) **Pathogens.** Biosolids that are sold or given away in a bag or other container must be Class A for pathogens.

(3) **Vector attraction.** One of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) must be met when biosolids are sold or given away in a bag or other container for application to the land.

(4) **Label or information sheet required.** Any person who prepares biosolids that are sold or given away in a bag or other container in the state of Washington, must comply with the requirements of (a)(i) through (vi) of this subsection when the biosolids product is prepared or derived from biosolids that do not meet exceptional quality standards.

(a) A label must be affixed to the bag or other container in which biosolids are sold or given away, or an information sheet must be provided to the person who receives biosolids that are sold or given away in a bag or other container. The label or information sheet must contain the following information:

(i) The name, address, and phone number of the person who prepared the biosolids.

(ii) A statement or information indicating that the product complies with applicable regulations for biosolids or that the product has been prepared to meet standards that make it safe for its intended use when used in accordance with the directions provided by the manufacturer.

(iii) A statement or information that encourages proper use of the product and protection of public health and the environment. This may include information on agronomic rates, product storage, hygiene, and protection of surface or ground water resources.

(iv) Agronomic rates for typical applications or guidance on how to determine the agronomic rate of application.

(v) A statement or information indicating that the product contains or is derived from biosolids.

(vi) Any additional information needed to facilitate safe use of the product.

(b) In addition to the information required in (a)(i) through (vi) of this subsection, the information in subsection (1)(b)(ii) of this section when the pollutant limits in Table 3 of WAC 173-308-160 are exceeded.

(c) Any person who prepares biosolids that are sold or distributed outside the jurisdiction of the state of Washington, must comply with the requirements in 40 CFR Part 503.14(e), as applicable.

(5) **Recordkeeping.** The person who prepares biosolids for sale or give away in a bag or other container must keep the records required in WAC 173-308-290 (2) and (5).

(6) **Reporting.** The person who prepares biosolids for sale or give away in a bag or other container must submit annual reports in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-260, filed 2/18/98, effective 3/21/98.]

WAC 173-308-270 Domestic septage management requirements. (1) Domestic septage may not be applied to a public contact site, a lawn, or a home garden, unless it is managed as biosolids originating from municipal sewage sludge according to this subsection (1).

When domestic septage managed as biosolids originating from municipal sewage is applied to the land, unless otherwise provided, all applicable requirements for biosolids must be met, including but not limited to requirements for pathogen and vector attraction reduction, site management and access restrictions, pollutant concentration limits, agronomic rates, obtaining and providing information, sampling and analysis, and recordkeeping and reporting.

(2) Domestic septage that is applied to the land must be treated by a process such as physical screening or grinding, or another approved method must be employed to significantly remove or reduce recognizable materials when septage is applied to the land.

(3) **Pathogens.**

(a) When domestic septage - class II is applied to the land, the alkaline stabilization requirement of (b) of this subsection must be met, or the Class B pathogen requirements in one of WAC 173-308-170 (3)(a) through (c) and the site management and access restrictions in subsection (5)(a)(i)

through (ix) and (b)(i) through (iv) of this section must be met.

(b) When domestic septage - class I or III is applied to the land, the pH of the septage must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for thirty minutes and the site management and access restrictions in subsection (5)(a)(i) through (ix) of this section must be met, or, when pH adjustment is not used to achieve pathogen reduction requirements, the site management and access restrictions in subsection (5)(a)(i) through (ix) and (b)(i) through (iv) of this section must be met.

(4) **Vector attraction reduction.** The requirements in one of (a), (b), or (c) of this subsection, must be met when domestic septage is applied to the land.

(a) The septage must be injected below the surface of the land;

(i) No significant amount of septage may be present on the land surface within one hour after the septage is injected; and

(ii) When the septage is Class A for pathogens, the septage must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(b) Septage must be incorporated into the soil within six hours after application to the land;

When septage that is incorporated into the soil is Class A with respect to pathogens, the septage must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(c) The pH of the septage must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for thirty minutes.

(5) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (ix) of this subsection are applicable when domestic septage is applied to the land.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after the application of septage.

(ii) Food crops with harvested parts that touch the septage/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of septage.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of septage when the septage remains on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of septage when the septage remains on the land surface for less than four months prior to incorporation into the soil.

(v) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of subsection (4)(a)(v) of this section during the period when access is restricted.

(vi) Septage must not be applied to land that is one hundred feet or less from surface waters of the state, unless otherwise specified by the department;

(vii) Septage must not be applied to the land so that it enters a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department;

(viii) Septage must not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(ix) Septage must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) In addition to the site management and access restrictions in (a)(i) through (ix) of this subsection, the additional site management and access restrictions in (b)(i) through (iv) of this subsection apply to domestic septage if the pH adjustment requirement of subsection (3)(b) of this section is not met when septage is applied to the land.

(i) Livestock must not be allowed to graze on the land for thirty days after application of septage.

(ii) Turf grown on land where septage is applied must not be harvested for one year after application of the septage when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(iii) Public access to land with a high potential for public exposure must be restricted for one year after the application of septage.

(iv) Public access to land with a low potential for public exposure must be restricted for thirty days after the application of septage.

(6) Except as provided in this subsection (6), septage that is applied to the land must be applied at a rate not exceeding the rate determined by equation (3).

$$AAR = \frac{N}{0.0026} \qquad \text{Equation (3)}$$

Where:

AAR = Annual application rate in gallons per acre per three hundred sixty-five-day period.

N = Amount of nitrogen in pounds per acre per 365 day period needed by the crop or vegetation grown on the land.

A person may not apply domestic septage to the land during a three hundred sixty-five-day period if the annual application rate in this subsection (6) has been reached during that period, unless the domestic septage is managed as biosolids originating from municipal sewage sludge per subsection (1) of this section.

(7) **Monitoring.**

(a) Samples of domestic septage that are collected and analyzed must be representative of the material that is applied to the land.

(b) When domestic septage - class I, II, or III is applied to the land and pH adjustment is used to meet any pathogen or vector attraction reduction requirement, each container of domestic septage that is applied to the land must be monitored to determine compliance with pH requirements.

(8) **Recordkeeping.** The person who prepares septage and the person who applies septage must keep the records required in WAC 173-308-290(6).

(9) **Reporting.** Facilities that prepare septage for application to the land, and persons who apply septage to the land, which is not prepared at a treatment works treating domestic sewage must submit annual reports in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-270, filed 2/18/98, effective 3/21/98.]

WAC 173-308-275 Contents of signs for land application sites. (1) When signs are required for the purpose of restricting access, they must contain at least the following information:

(a) The name and address or phone number of the generator and if different, the person who applies;

(b) The names, addresses, and phone numbers of the regulatory and permitting authorities;

(c) The material that is being applied (biosolids or a more detailed description);

(d) Notice that access is restricted, and if desired, the date after which access is no longer restricted; and

(e) If applicable, a notice on limitations regarding the harvest of edible plants from the site.

(2) With the consent of the department, "no trespassing" signs may be substituted for the informational signs required under subsection (1) of this section.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-275, filed 2/18/98, effective 3/21/98.]

WAC 173-308-280 Requirements for facilities storing biosolids. (1) Facilities storing biosolids must do so in accordance with the provisions of a permit issued under this chapter, if an applicable permit has been issued.

(2) Biosolids may not be stored in a manner that would be likely to result in the contamination of ground water, surface water, air, or land under current conditions or in the case of fire or flood.

(3) Facilities storing liquid biosolids in surface impoundments must meet the requirements in WAC 173-304-430 and other applicable sections of chapter 173-304 WAC that apply to the design, construction, and operation of surface impoundments.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-280, filed 2/18/98, effective 3/21/98.]

WAC 173-308-290 Recordkeeping. (1)(a) Both the person who prepares biosolids and the person who applies bulk biosolids to the land must keep certain records and certification statements showing that applicable standards for biosolids quality, treatment, and management have been met. Records must also be kept on the amount and type biosolids applied to the land under different management scenarios or that are disposed of in a municipal solid waste landfill.

(b) A responsible official as described in WAC 173-308-310(8) must sign all certification statements required under this section.

(2) The person who prepares biosolids must keep the following records (amounts recorded as dry tons):

(a) The amount of bulk biosolids applied by the preparer or the preparer's agents to agricultural land;

(b) The amount of bulk biosolids applied by the preparer or the preparer's agents to forestland;

(c) The amount of bulk biosolids applied by the preparer or the preparer's agents to a public contact site;

(d) The amount of bulk biosolids applied by the preparer or the preparer's agents to a land reclamation site;

(e) The amount of bulk biosolids applied by the preparer or the preparer's agents to a lawn or home garden;

(f) The amount of biosolids that are sold or given away by the preparer in a bag or other container for application to the land;

(g) The amount of biosolids in a compost or blended biosolids product that is sold or given away by the preparer in bulk form or in a bag or other container for application to the land;

(h) The amount of bulk biosolids that are sold or given away by the preparer to another person who prepares biosolids for application to the land;

(i) The amount of bulk biosolids that are sold or given away by the preparer to a person other than an agent of the preparer for application to the land; and

(j) The amount of biosolids that are disposed in a municipal solid waste landfill on an emergency, temporary, or long-term basis.

(3) When bulk biosolids are applied to the land, the person who prepares the biosolids must develop and maintain the following information, as applicable, for five years:

(a) If the pollutant limits in Table 3 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met; or, if the pollutant ceiling concentrations in Table 1 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met.

(b) If the Class A pathogen requirements in one of WAC 173-308-170 (2)(a) through (f) were met, process monitoring and/or laboratory analysis data showing that those requirements were met, and a description of how those requirements were met; or, if the Class B pathogen standards in one of WAC 173-308-170 (3)(a), (b), or (c) were met, process monitoring and/or laboratory analysis data showing that those requirements were met, and a description of how those requirements were met.

(c) If the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were met, process monitoring and/or laboratory analysis monitoring data showing that those requirements were met and a description of how those requirements were met.

(d) One of the following certification statements, as applicable:

(i) If the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were met, the following signed certification: "I certify, under penalty of law, that

the (insert Class A or Class B as appropriate) pathogen requirements in (insert one of WAC 173-308-170 (2)(a), (b), (c), (d), (e), or (f) if Class A, or insert one of WAC 173-308-170 (3)(a), (b), or (c) if Class B), and the vector attraction reduction requirement in (insert one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7)) have been met. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(ii) If the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were not met, the following signed certification: "I certify, under penalty of law, that the (insert Class A or Class B as appropriate) pathogen requirements in (insert one of WAC 173-308-170 (2)(a), (b), (c), (d), (e), or (f) if Class A, or insert one of WAC 173-308-170 (3)(a), (b), or (c) if Class B) have been met. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(4) When bulk biosolids are applied to the land, the person who applies the biosolids must develop and maintain the following information, as applicable, for five years or indefinitely as required in (c) of this subsection:

(a) If the Class B pathogen standards in one of WAC 173-308-170 (3)(a), (b), or (c) were met, a description of how the site management and access restrictions in WAC 173-308-210 (4)(a)(i) through (x), or WAC 173-308-220 (4)(a)(i) through (ix), or WAC 173-308-230 (4)(a)(i) through (ix), or WAC 173-308-240 (4)(a)(i) through (x), as applicable, were met for each site on which biosolids were applied.

The following signed certification: "I certify, under penalty of law, that the site management and access restrictions in (insert WAC 173-308-210 (4)(a)(i) through (x), or WAC 173-308-220 (4)(a)(i) through (ix), or WAC 173-308-230 (4)(a)(i) through (ix), or WAC 173-308-240 (4)(a)(i) through (x), as applicable) have been met for each site on which bulk biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the site management and access restrictions have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(b) If the vector attraction reduction requirements in WAC 173-308-210 (3)(b)(i) or (ii), WAC 173-308-220 (3)(b)(i) or (ii), WAC 173-308-230 (3)(b)(i) or (ii), or WAC 173-308-240 (4)(b)(i) or (ii) were met, a description of how those requirements were met.

The following signed certification: "I certify, under penalty of law, that the vector attraction reduction requirement in (insert WAC 173-308-210 (3)(b)(i) or (ii), WAC 173-308-220 (3)(b)(i) or (ii), WAC 173-308-230 (3)(b)(i) or (ii), WAC 173-308-240 (3)(b)(i) or (ii), as applicable) has been met for each site on which biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the vector attraction reduction and site management requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(c) If the pollutant ceiling concentration limits in Table 1 of WAC 173-308-160 were met (but the concentration limits in Table 3 were exceeded), the information in (c)(i) through (v) of this subsection must be developed and kept indefinitely.

(i) The location, by street address if applicable, a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and the section, township, and range of each quarter section on which biosolids were applied.

(ii) The number of hectares in each site on which bulk biosolids were applied.

(iii) The date and time bulk biosolids were applied to each site.

(iv) The cumulative amount of each pollutant (i.e., kilograms) listed in Table 2 of WAC 173-308-160 in the bulk biosolids applied to each site, including the amount(s) in WAC 173-308-160 (2)(b)(i) and (iii).

(v) The amount of biosolids (i.e., dry metric tons) applied to each site.

(d) A description of how the requirement to obtain information under WAC 173-308-160 (2)(b) was met.

(i) The following signed certification: "I certify, under penalty of law, that the requirement to obtain information under WAC 173-308-160 (2)(b) has been met for each site on which bulk biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(ii) If the biosolids that were applied to the land did not meet standards to be classified as exceptional quality, and the site management restrictions in WAC 173-308-210 (4)(b)(i) through (iii), or WAC 173-308-220 (4)(b)(i) through (iii), or WAC 173-308-230 (4)(b)(i) through (iii), or WAC 173-308-240 (4)(b)(i) through (iii) were met, the following signed certification:

"I certify, under penalty of law, that the site management restrictions in (insert WAC 173-308-210 (4)(b)(i) through (iii), or WAC 173-308-220 (4)(b)(i) through (iii), or WAC 173-308-230 (4)(b)(i) through (iii), or WAC 173-308-240 (4)(b)(i) through (iii), as applicable) were met for each site on which bulk biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the site management restrictions have been met. I am aware

that there are significant penalties for false certification including fine and imprisonment."

(5) When biosolids are sold or given away in a bag or other container for application to the land, the person who prepares the biosolids must develop and maintain the following information, as applicable, for five years:

(a) If the pollutant limits in Table 3 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met; or, if the pollutant ceiling concentrations in Table 1 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met.

(b) Process monitoring and/or laboratory analysis data showing that the Class A pathogen requirements in one of WAC 173-308-170 (2)(a) through (f) were met, and a description of how those requirements were met.

(c) Process monitoring and/or laboratory analysis data showing that the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were met, and a description of how those requirements were met.

(d) The following certification statement:

"I certify, under penalty of law, that the Class A pathogen requirement in (insert one of WAC 173-308-170 (2)(a), (b), (c), (d), (e), or (f) if Class A), and the vector attraction reduction requirement in (insert one of WAC 173-308-180 (2) through (7)) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen requirement and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(e) When the biosolids are subject to the requirements of WAC 173-308-160(4), the concentration in the biosolids of each pollutant listed in Table 4 of WAC 173-308-160, and the annual whole biosolids application rate that does not cause the annual pollutant loading rates in Table 4 of WAC 173-308-160 to be exceeded.

The following certification statement:

"I certify, under penalty of law, that the labeling and notification requirement in WAC 173-308-260 (1)(b)(ii) has been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the labeling and notification requirements are met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(6) When domestic septage is applied to the land, the person who applies the domestic septage must develop and maintain the following information, as applicable, for five years:

(a) The location, by street address if applicable, a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and the section, township and range of each quarter section on which septage is applied.

(b) The number of acres in each site on which septage is applied.

(c) The date and time septage is applied to each site.

(d) The nitrogen requirement for the crop or vegetation grown on each site during a three hundred sixty-five-day period.

(e) The rate, in gallons per acre per three hundred sixty-five-day period, at which septage is applied to each site and the total number of gallons of septage applied to each site;

(f) The source of the septage, including the name and address of the individual or business where the septage was generated, or in the case of a centralized septage treatment facility, the name of the person or business who delivered the septage, the dates of delivery, and how much septage was delivered.

(g) The class of septage as defined in WAC 173-308-080.

(h) A description of how the pathogen requirements in WAC 173-308-270 (3)(a) or (b) were met.

(i) A description of how the vector attraction reduction requirements in one of WAC 173-308-270 (4)(a), (b), or (c) were met.

(j) A description of how the applicable site management and access restriction requirements in WAC 173-308-270(5) were met.

(k) The following signed certification: "I certify, under penalty of law, that the pathogen requirements in (insert either WAC 173-308-270 (3)(a) or (b)), the vector attraction reduction requirements in (insert one of WAC 173-308-270 (4)(a), (b), or (c)), and the applicable site management and access restriction requirements in WAC 173-308-270(5) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements and site management and access restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-290, filed 2/18/98, effective 3/21/98.]

WAC 173-308-295 Annual reports. (1) Class I biosolids management facilities, treatment works treating domestic sewage with a design flow rate equal to or greater than one million gallons per day, and those that serve 10,000 people or more, must submit to the department by March 1 of each year, the following information for the preceding calendar year:

(a) All applicable information required under WAC 173-308-290 (2), (3) and (5);

(b) The information in WAC 173-308-290 (4)(c)(i) through (v) and WAC 173-308-290 (4)(d) and (d)(i) and (ii) when ninety percent or more of any of the cumulative pollutant loading rates in Table 2 of WAC 173-308-160 have been reached.

(2) Other facilities and treatment works treating domestic sewage that are not required to submit an annual report under WAC 173-308-295(1) must submit part or all of any applicable information in WAC 173-308-290 (1)(a) and (b) as required by the department on the written request of the department, or in accordance with the requirements of an applicable permit issued by the department.

(3) All persons who apply septage to the land must submit to the department by March 1 of each year, the following information for the preceding calendar year:

(a) The number of gallons of septage applied to the land.

(b) The number of acres of land to which septage was applied.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-295, filed 2/18/98, effective 3/21/98.]

WAC 173-308-300 Disposal of municipal sewage sludge or biosolids in municipal solid waste landfill units. (1) When biosolids are placed in a municipal solid waste landfill unit they are considered solid waste (municipal sewage sludge).

(2) The use of municipal sewage sludge or biosolids that are subject to regulation under this chapter, as daily cover or as an amendment to daily cover is not a beneficial use and is considered disposal.

The use of biosolids as a component of landfill intermediate or final cover is considered a beneficial use if it is consistent with an approved landfill plan of operations or closure/post-closure plan.

(a) Landfills that use biosolids that do not meet standards to be classified as exceptional quality as a component of intermediate or final cover must have an approved site specific land application plan that meets the requirements of WAC 173-308-310(6) and 173-308-210, 173-308-230, or 173-308-240, as applicable.

(b) For the purposes of beneficial use on a municipal solid waste landfill unit, a site specific land application plan may recognize an approved plan of operations or closure/post-closure plan that addresses the substantive requirements of WAC 173-308-310(6) and 173-308-210, 173-308-230, or 173-308-240, as applicable.

(3) Any landfill accepting municipal sewage sludge for disposal must be in compliance with the requirements of chapter 173-351 WAC and 40 CFR Part 258.

(4) Municipal sewage sludge that is disposed in a municipal solid waste landfill must meet the liquids in landfills restrictions of WAC 173-351-200(9).

(5) Municipal sewage sludge that is disposed in a municipal solid waste landfill must not be hazardous waste as defined in chapter 173-303 WAC.

(6) Disposal on an emergency or temporary basis. Facilities wishing to dispose of municipal sewage sludge in a municipal solid waste landfill on an emergency or temporary basis must meet the conditions of (a) through (c) of this subsection and those in WAC 173-351-220(10).

(a) The person proposing to dispose of municipal sewage sludge must obtain a written determination from the local health department where the biosolids are being or would be land applied, that a potentially unhealthful circumstance exists under present conditions of management or would result from further land application of the biosolids, and that other management options are unavailable or would pose a threat to human health or the environment.

(b) Upon making the determination in (a) of this subsection, the local health department must notify the department in writing, of its findings and the basis for its determination. In its notification, the local health department must state the date on which disposal is approved to commence, any conditions, and the date after which continued disposal is prohibited.

(i) If the municipal sewage sludge is proposed to be disposed of in a municipal solid waste landfill outside the jurisdiction of the local health department in (b) of this subsection, the person proposing to dispose of the municipal sewage sludge must obtain written approval for disposal from the health department in the receiving jurisdiction.

(ii) If the jurisdictional health department in (b)(i) of this subsection, approves disposal of the municipal sewage sludge, the person proposing the disposal must forward a copy of the jurisdictional health department's determination to the department.

(c) Any person wishing to dispose of municipal sewage sludge in a municipal solid waste landfill on a temporary basis must submit a plan for approval to the department. The plan must include the following information:

(i) The conditions that make disposal necessary.

(ii) The steps that will be taken to correct the conditions in (c)(i) of this subsection, so that disposal will not become a long-term management option.

(iii) A time table for implementing the steps to be taken in (c)(ii) of this subsection.

(7) Disposal on a long-term basis.

(a) Facilities wishing to dispose of municipal sewage sludge in a municipal solid waste landfill on a long-term basis must have authorization to do so in a valid NPDES or state waste discharge permit issued under chapter 90.48 RCW, or a valid permit issued in accordance with this chapter.

(b) Any person wishing to engage in the disposal of municipal sewage sludge in a municipal solid waste landfill on a long-term basis must meet the conditions of (b)(i) and (ii) of this subsection and those in subsections (3), (4), and (5) of this section.

(i) The person proposing to dispose of municipal sewage sludge or biosolids must demonstrate to the satisfaction of the department that other options for disposal or beneficial use are economically infeasible.

(ii) The person proposing to dispose of municipal sewage sludge must provide the department with written approval for disposal from the local health department in the receiving jurisdiction.

(8) All facilities that dispose of municipal sewage sludge in a municipal solid waste landfill must submit the information in WAC 173-308-290 (2)(j), as required under WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-300, filed 2/18/98, effective 3/21/98.]

WAC 173-308-310 Permitting. (1) Applicable facilities—Application required.

(a) Except as provided in (a) of this subsection, all treatment works treating domestic sewage that engage in practices regulated under this chapter are applicable facilities, and must apply for an individual permit or for coverage under a general permit for the final use or disposal of biosolids.

Facilities that compost biosolids, and those facilities where only septage is applied to the land or collected and

treated prior to application to the land, do not require permitting under this chapter if:

(i) A permit is not otherwise required in order to comply with the Federal Clean Water Act;

(ii) The department and local health department agree that a permit issued by the local health department will be adequate;

(iii) The conditions of the permit issued by the local health department meet or exceed the requirements of this chapter; and

(iv) The department does not otherwise find that a state issued permit is necessary because one or more of the conditions in (b)(i) through (iv) of this subsection exists.

(b) Designation as a treatment works treating domestic sewage. In addition to facilities meeting the definition of a treatment works treating domestic sewage in WAC 173-308-080, the department may designate any person, site, or facility that treats, uses, transports, or applies biosolids, as a treatment works treating domestic sewage, and require the owner or operator to apply for a permit if:

(i) The department determines that a permit is necessary to protect human health or the environment from the adverse effect of a pollutant in the biosolids;

(ii) The department determines that a permit is necessary to protect human health or the environment from poor biosolids management practices;

(iii) The department determines that a permit is necessary to ensure compliance with any of the requirements in this chapter; or

(iv) Bulk biosolids originating from a source or location outside the jurisdiction of the state of Washington are being applied to the land or received at any site.

(c) It is a violation of this chapter for a facility to fail to submit a permit application to the department as required by these rules.

(2) **General and individual permits.** The department will issue permits for the treatment and final use or disposal of biosolids.

(a) The department will issue, modify, revoke and reissue, and terminate general permits in accordance with the procedures in chapter 173-226 WAC.

(b) The department will accept and consider applications for coverage under a general permit, modify conditions of coverage, revoke and reauthorize coverage, or terminate coverage under a general permit in accordance with the provisions of this chapter.

(c) The department will issue, modify, revoke and reissue, or terminate individual permits in accordance with the provisions of this chapter.

(3) **Permit selection.**

(a) After the department has issued a general permit for the final use or disposal of biosolids, all applicable facilities must submit a notice of intent or apply for coverage under the general permit, unless:

(i) The facility has a current individual permit issued under this chapter;

(ii) The department requires a facility to apply for an individual permit; or

(iii) On written request of the applicant, the department has granted permission to apply for an individual permit.

(A) A facility may request an individual permit if a practice it proposes is not addressed in a general permit issued by the department.

(B) A facility may seek coverage under a general permit for any portion of its biosolids management practices that are applicable under the general permit, and may also request an individual permit for any portion of its biosolids management practices that are not applicable under the general permit.

(iv) The department may require any facility applying for an individual permit under (a)(iii)(A) or (B) of this subsection to limit its practices for the final use or disposal of biosolids to those that are authorized in a general permit, and to apply for a general permit.

(b) The department may notify a facility that it is covered by a general permit, even if the facility has not submitted a permit application or notice of intent as required under this subsection (3).

(i) A facility so notified may request an individual permit in accordance with the provisions of (a)(iii) of this subsection.

(ii) Facilities that are notified of coverage under (b) of this subsection must submit a notice of intent or permit application as directed by the department.

(4) **Timing of applications and notices of intent – renewal of coverage.**

(a) Except for facilities in (e)(i) and (f) of this subsection, existing facilities that are class one biosolids management facilities, publicly owned treatment works with a design flow rate equal to or greater than one million gallons per day, and those that serve a population of 10,000 people or more must either:

(i) Submit an application for coverage under a general permit within ninety days after issuance of a biosolids general permit by the department; or

(ii) Submit a notice of intent within ninety days of issuance of an applicable general permit, followed by a complete permit application within one hundred eighty days of issuance of the applicable general permit.

(b) Except for facilities in (a), (e)(i), and (f) of this subsection, existing facilities must submit a notice of intent to be covered under a general permit within ninety days after issuance of a biosolids general permit by the department.

(c) Except for facilities in (e)(ii) and (f) of this subsection, new facilities that are class one biosolids management facilities, publicly owned treatment works with a design flow rate equal to or greater than one million gallons per day, and those that serve a population of 10,000 people or more must submit an application for coverage under a general permit or a request for an individual permit at least one hundred eighty days in advance of engaging in applicable biosolids management activities.

(d) Except for facilities in (c), (e)(ii) and (f) of this subsection, new facilities must submit a notice of intent to be covered under a general permit or a request for an individual permit at least one hundred eighty days in advance of engaging in applicable biosolids management activities.

(e)(i) Existing facilities that have not been previously permitted under this subsection that wish to request an individual permit under subsection (3)(a)(iii) of this section must

do so within thirty days of issuance of a biosolids general permit by the department.

(ii) New facilities that wish to request an individual permit under subsection (3)(a)(iii) of this section must do so at least one hundred eighty days in advance of engaging in applicable biosolids management activities.

(f) Facilities that have been directed to apply for an individual permit under subsection (3)(a)(ii) of this section must submit an application for an individual permit as directed by the department, but the department will allow at least ninety days for a submittal.

(g) Facilities that are denied an individual permit must submit a notice of intent or a complete permit application for coverage under a general permit as would otherwise be required, within sixty days after being denied an individual permit unless a later date is authorized by the department.

(h) Facilities, other than those in (a) of this subsection, that have submitted a notice of intent to be covered under a general permit must submit a complete permit application as follows:

(i) Except as required under (h)(iv) of this subsection, if the facility is subject to permitting under chapter 173-216 or 173-220 WAC, a complete permit application is due on the date when an application for a state waste discharge or NPDES permit, or for renewal thereof, is due, or one hundred eighty days after issuance of the applicable general permit, whichever is later.

(ii) Except as required under (h)(iv) of this subsection, if the facility is not subject to permitting under chapter 173-216 or 173-220 WAC but is subject to permitting under chapter 173-304 WAC and local solid waste ordinances, a complete permit application is due on the date when an application for a local solid waste permit, or for renewal thereof, is due, or one hundred eighty days after issuance of the applicable general permit, whichever is later.

(iii) Other facilities that have submitted a notice of intent must submit a complete permit application as directed by the department, but the department will allow at least ninety days for a submittal.

(iv) The department may require facilities under (h)(i) and (ii) of this subsection to submit a complete permit application at an earlier date for the purpose of expediting the permitting process, or if the department finds that any of the conditions in subsection (1)(b)(i) through (iv) of this section are met. Facilities required to make an early submittal must do so within ninety days from the time of the first request unless a later date is authorized by the department.

(i) Renewal of coverage.

(A) All facilities permitted under this section must submit a notice of intent to continue coverage under a general permit or for initial coverage under a general permit, or an application for an individual permit or for renewal of an individual permit, at least one hundred eighty days prior to the expiration date of their applicable permit.

Facilities that are submitting a notice of intent must submit a complete updated permit application according to the schedule in (a) through (h) of this subsection.

(B) When a facility has made timely and sufficient notice of intent or application as required in (i) of this subsection, an expiring permit remains in effect and enforceable until:

(I) The application has been denied;

(II) A replacement permit has been issued by the department; or

(III) The department has cancelled the expired permit.

(C) Unless the department specifies otherwise in a renewing general permit, or notifies a facility directly, facilities previously covered under a general permit issued in accordance with subsection (2) of this section are automatically covered under a new general permit if they reapply for coverage in accordance with (i) of this subsection; and

(I) The facility will not implement a significant change in biosolids management practices under the new permit; and

(II) The public notice requirements of subsection (11) of this section have been met and there are no sustainable objections to continuation of coverage.

(D) For facilities that are renewing coverage under a general permit, land application plans required under subsection (6) of this section that have been previously approved are automatically approved under the new general permit as long as biosolids management practices remain consistent with the approved plan.

(E) Coverage under an expired permit for permittees who fail to submit a timely and sufficient application or notice of intent shall cease on the expiration date of the permit.

(5) **Contents of permit applications – notices of intent.**

(a) All facilities must submit a complete and factually correct permit application in accordance with the schedule established in subsection (4) of this section, on forms or in a format specified by the department. When complete, all permit applications must contain at least the information in (a)(i) through (xi) of this subsection:

(i) The activities conducted by the applicant that require it to obtain a permit, and if applying under a general permit, the name of the permit;

(ii) Name, mailing address, and location of the facility for which the application is submitted;

(iii) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity;

(iv) Whether or not the facility or any associated facilities or land applications sites are located on Indian or federal lands;

(v) A listing of other relevant environmental permits, and all permits or construction approvals received or applied for under any of the following programs:

(A) Hazardous waste management program under the Resource Conservation and Recovery Act;

(B) Underground injection control program under the Safe Drinking Water Act;

(C) National pollutant discharge elimination system program under the Clean Water Act;

(D) Prevention of significant deterioration program under the Clean Air Act;

(E) Nonattainment program under the Clean Air Act;

(F) National emission standards for hazardous pollutants preconstruction approval under the Clean Air Act;

(G) Ocean dumping permits under the Marine Protection, Research, and Sanctuaries Act;

(H) Dredge or fill permits under section 404 of the Clean Water Act;

(vi) A map extending one mile beyond the property boundaries of the facility, showing the location and means of access to the facility, and additional maps if necessary, showing the same for any associated treatment or storage facilities.

(vii) Any biosolids monitoring data the applicant has for the last two years, including for land application sites any available soil, or surface or ground water monitoring data, with a description of the sampling locations, and for wells the approximate depth to ground water.

(viii) A description of the applicant's biosolids use and disposal practices including, where applicable, the location of any sites where the applicant transfers biosolids for treatment or disposal, as well as the name of the applicator or other contractor who applies the biosolids to land if different from the applicant;

(ix) Land application plans, as required under subsection (6) of this section;

(x) The amount of biosolids produced and the amount of biosolids applied to the land during the previous year, and estimated to be produced or applied to the land on an annual basis during the life of the permit;

(xi) Any information required to determine the appropriate standards for permitting under this chapter, and any other information the department may request and reasonably require to assess biosolids use and disposal practices, to determine whether or not to issue a permit, or to ascertain appropriate permit requirements under this chapter.

(b) A notice of intent to be covered under a general permit for biosolids recycling must contain:

(i) The name of the general permit under which coverage is being sought, and a statement declaring the applicant's intent to comply with the requirements of the permit.

(ii) The information required in (a)(i) through (iii) of this subsection, and the location and a description of any site(s) where biosolids are treated, stored, disposed, or applied, and whether or not any permit, including a local solid waste permit has been issued for a site.

(iii) Any information specifically required for a notice of intent under the applicable general permit.

(6) **Land application plans.** (a) Land application plans are not required when exceptional quality biosolids are applied to the land, except as specified in (a)(ii) or (iii) of this subsection.

(i) Any person who prepares exceptional quality biosolids for application to the land must determine and assure to the extent practicable, through recordkeeping and other means, that all applicable criteria of this chapter and any applicable permit are met when bulk exceptional quality biosolids are applied to the land.

(ii) Any person who prepares exceptional quality biosolids for application to the land and who fails to satisfy the requirements in (a)(i) of this subsection, may be required to submit a general or site specific land application plan, or both, for any or all sites where bulk exceptional quality biosolids are applied to the land, and may also be required to comply with the public notice requirements in subsection (11) of this section.

(iii) The department may require a site specific land application plan for any site where bulk exceptional quality biosolids are proposed to be applied if the plan is necessary to evaluate potential permit conditions or if the department finds there would be a strong benefit to the public from the preparation of a site specific plan.

(iv) The department may require advance notice prior to the application of bulk exceptional quality biosolids to the land. In such case the department will notify the facility in writing of the conditions requiring advance notice, the length of advance notice required, and the length of time the requirement for advance notice will remain in effect.

(b) Land application plans are required when bulk biosolids that do not meet criteria to be classified as exceptional quality are applied to the land. Except when biosolids are delivered to a beneficial use facility as provided in (g) of this subsection, facilities that propose to apply biosolids to the land that do not meet criteria to be classified as exceptional quality must either:

(i) Submit with their permit application a site specific land application plan for each site where biosolids will be applied during the life of the permit; or

(ii) Submit with their permit application a general land application plan, and at a later date prior to applying biosolids to a site, a site specific land application plan for each site where biosolids will be applied to the land;

(iii) Facilities that submit a general land application plan may also submit at the same time any available site specific land application plans for approval.

(c) All site specific land application plans must be consistent with a facility's general land application plan, if a general land application plan is required.

(d) Each site specific land application plan must provide information necessary to determine if the site is appropriate for land application of biosolids, and a description of how the site will be managed. At a minimum, site specific land application plans must address the following:

(i) In accordance with the provisions of WAC 173-308-160 (2)(b), whether or not it is known or can be determined that biosolids containing pollutants in excess of the values established in Table 3 of WAC 173-308-160 have ever been applied to the site, and if so:

(A) The date(s) when the biosolids were applied (if known);

(B) The amount of biosolids applied (if known);

(C) The concentrations of the pollutants in the biosolids (if known);

(D) The area(s) of the site to which the biosolids were applied (if known);

(ii) A discussion of the types of crops grown or expected to be grown, their intended end use (e.g., pasture grass for a feed crop, corn as a food crop), and the current distribution of crops on the site;

(iii) An explanation of how agronomic rates will be determined during the life of the site, along with any currently available calculations. Whenever agronomic rates are determined or conditions change (i.e., a change in crops or agronomic rates) an update of the agronomic rate calculations must be filed with the department;

(iv) Method(s) of application;

(v) Seasonal and daily timing of biosolids applications;

(vi) Any available data from soils, surface water, or ground water monitoring collected from the site within the last two years;

(vii) The name of the county and water resource inventory area where biosolids will be applied;

(viii) A description of how biosolids will be stored at the site and also addressing related off-site storage;

(ix) Site map(s) showing:

(A) The location and means of access to the facility;

(B) The number of acres in the site;

(C) Location and extent of any wetlands on the site;

(D) A topographic relief of the application site and surrounding area;

(E) Adjacent properties and uses and their zoning classification;

(F) Any seasonal surface water bodies located on the site or perennial surface water bodies within 1/4 mile of the site;

(G) The location of any wells within 1/4 mile of the site that are listed in public records or otherwise known to the applicant, whether for domestic, irrigation, or other purposes;

(H) The width of buffer zones to surface waters, property boundaries and other features requiring buffers;

(I) The presence and extent of any threatened or endangered species or related critical habitat;

(J) The location of any critical areas on site, as required to be identified under chapter 36.70A RCW in the county's growth management plan;

(K) The location and size of any areas that will be used to store biosolids.

(e) Except for facilities under (e)(vi) of this subsection, applicants including beneficial use facilities intending to apply biosolids to the land that do not meet criteria to be classified as exceptional quality, to sites for which a site specific land application plan is not submitted as a part of the permit application, must submit for approval as a part of their permit application, a general land application plan that at a minimum:

(i) Describes the geographical area covered by the plan, including the names of all counties and water resource inventory areas where biosolids may be applied;

(ii) Identifies site selection criteria;

(iii) Describes how sites will be managed;

(iv) Provides for not less than thirty days advance notice to the department of new or expanded land application sites, including those subject to provisional approval under subsection (17) of this section, to allow time for the department to object prior to the biosolids application; and

(v) Provides for advance public notice as required in subsection (11) of this section, and that is reasonably calculated to reach potentially interested adjacent and abutting property owners; except

(vi) A general land application plan is not required when biosolids are provided to a beneficial use facility and the requirements of (g) of this subsection are met.

(f) As individual sites are identified in accordance with the general land application plan in (6)(e) of this subsection, facilities, including beneficial use facilities applying biosolids that do not meet criteria to be classified as exceptional quality must develop and submit the information required for site specific land application plans in (d) of this subsection.

(g) When biosolids are provided to a beneficial use facility that has been permitted as a treatment works treating domestic sewage, the person who prepares the biosolids is not required to prepare a land application plan for the biosolids that will be applied to the beneficial use facility if:

(i) As a part of the permit application, the person who prepares the biosolids identifies the beneficial use facility(ies) to which biosolids may be provided, or, if specific beneficial use facilities cannot be identified, specifies the criteria by which beneficial use facilities may be selected at a future date; and

(ii) At least thirty days in advance of delivering biosolids to the beneficial use facility the person who prepares the biosolids submits to the department a certification statement, signed in accordance with the provisions of subsection (8) of this section by the person who prepares the biosolids, stipulating the following:

(A) That the applicable site specific land application plan and other management plans approved for the beneficial use facility are appropriate to the quality of biosolids being provided by the person who prepared the biosolids;

(B) That the person who prepared the biosolids has reviewed the public notice conducted by the beneficial use facility and the conditions in subsection (11)(d) of this section have been met, or additional public notice has been conducted in accordance with subsection (11) of this section;

(h) All land application plans, including those authorized under provisional approval in accordance with subsection (17) of this section, are subject to review and final approval by the department. If a land application plan is found to be insufficient, the department may either request additional information or may impose additional requirements as a condition of approval. Any additional requirements imposed under (h) of this subsection are considered to be permit requirements, fully enforceable in accordance with the provisions of this chapter and the applicable permit.

(7) **Submitting permit applications and notices of intent.** Facilities must submit copies of their permit application or notice of intent as follows:

(a) The original must be submitted to the biosolids coordinator at the headquarters office of the department of ecology, and one copy must be submitted to each regional office of the department of ecology where biosolids will be treated or applied to the land.

(b) Unless a local health department otherwise requests as provided in (b) of this subsection, one copy must be submitted to the local health department in each county where biosolids will be treated, stored, applied to the land, or disposed in a municipal solid waste landfill.

Local health departments that elect not to participate in the implementation of this chapter may notify the department in writing that they do not wish to receive copies of permit applications or land application plans.

(8) **Signatories to permit applications, notices of intent, reports, and other documents.**

(a) Applications. All permit applications must be signed as follows:

(i) For a corporation. By a responsible corporate officer. For the purpose of this chapter, 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-making 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;

(iii) For a municipality, state, federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, 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) All reports required by permits, and other information requested by the department must 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 the overall operation of the regulated facility or activity such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters; 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.

(d) Certification. Any person signing a document under (a) or (b) of this subsection must make the following certification, unless a different certification is applicable under another related section of this chapter:

"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."

(9) **Public access to information.** In accordance with chapter 42.17 RCW, the department must provide, upon request, any information submitted as part of an application for an individual permit or for coverage under a general permit, except as provided in (a) of this subsection.

(a) In accordance with chapters 42.17, 43.21A, 70.105, and 90.52 RCW, the department must protect any information (other than information on the quality of biosolids) contained in applications as confidential upon a showing by any person that the information, if made public, would divulge methods or processes entitled to protection as trade secrets of the person.

(b) Any information accorded confidential status, whether or not contained in any application form, must be disclosed, upon request, to the regional administrator of EPA.

(10) **Recordkeeping required for permit applications.** Applicants must keep records of all information used to complete permit applications and any supplemental information submitted for a period of five years, or longer if otherwise required by this chapter, the conditions of the applicable permit, or other state or local laws;

(11) **Public notice and comment period.**

(a) All facilities that are applying for coverage under a general permit, facilities applying for renewal of coverage under a general permit that propose a significant change in biosolids management practices, and those applying for an individual permit or for renewal thereof, must issue public notice within each county where they will prepare biosolids for application to the land, and except as provided in (c) and (d) of this subsection, in each county where biosolids not meeting the criteria to be classified as exceptional quality will be applied to the land. Notice must be given as follows:

(i) The applicant must publish two notices, at intervals of at least one week, in a newspaper of general circulation in each county where biosolids are proposed to be applied to the land.

(ii) The applicant must mail a copy of the notice to any person or group that has notified the applicant in writing of an interest in the applicant's biosolids management activities.

(iii) For a period of at least thirty days, beginning not later than the last date of newspaper publication required in (a)(i) of this subsection, notice must be posted at all sites identified in the permit application where bulk biosolids that do not meet the standards to be classified as exceptional quality will be applied to the land;

(A) When newspaper notice is not required for new sites being proposed in accordance with an approved general land application plan per (c) of this subsection, the thirty-day notice period in (a)(iii) of this subsection begins when the direct mail notice requirement of (a)(ii) of this subsection has been met.

(B) It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(iii) of this subsection during the public notice period.

(iv) Notice must be given by any other method required by the department.

(v) At the time of the initial notice, copies of the notice and an explanation of all places where and when the notice was or will be published or posted must be submitted to:

(A) The contact person in the regional or headquarters office of the department of ecology that has lead responsibility for the permit; and

(B) The local health department in each county where biosolids will be treated, stored, applied to the land, or disposed in a municipal solid waste landfill, unless the local health department has waived receipt of notification under subsection (7)(b) of this section.

(b) Notices under (a) of this subsection must contain the information in (b)(i) through (xi) of this subsection:

(i) The name and address of the facility seeking the permit or filing a notice of intent, and a contact person;

(ii) When the local health department has accepted delegation of responsibility under WAC 173-308-050, the address of the local health department and a contact person;

(iii) The address of the regional or headquarters office of the department of ecology that has lead responsibility for the permit, and a contact person;

(iv) A brief statement of the applicant's biosolids management practices for which a permit is sought or a notice of intent is being submitted;

(v) If coverage under a general permit is being sought, the name of the general permit or the name and location of the site if notice is being given for a site specific land application plan;

(vi) The statement: "Any person wishing to comment on this application or desiring to present their views regarding this application to the department of ecology or its delegated representative must do so in writing within thirty days of the last date of newspaper publication of this notice. Comments should be addressed to (insert the name and address of the person identified in (b)(vii) of this subsection)."

(vii) The person to whom comments should be addressed is the person in (b)(vii)(A) or (B) of this subsection, whichever is appropriate;

(A) When the application or notice of intent is for coverage under a general permit or for an individual permit, the person to whom comments should be directed is the department of ecology contact in (b)(iii) of this subsection.

(B) When the proposal is for a specific land application site, the person to whom comments should be directed is the department of ecology contact in (b)(iii) of this subsection, except where responsibility has been delegated to a local health department, in which case the recipient of comments should be the local health department contact in (b)(ii) of this subsection.

(viii) A statement specifying:

(A) Whether or not the permit application contains any information about current or proposed biosolids application sites;

(B) Whether or not the permit application contains a plan specifying how future application sites will be identified;

(C) If biosolids will be provided to any other facility, including a beneficial use facility; and

(D) How the public will be notified regarding the selection of future land application sites.

(ix) The time and place of any public hearing or meeting that will be held or the procedures to request one, and other procedures by which the public may participate in the final permit decision;

(x) The means by which an interested person or organization can have their name placed on a list to be maintained by the applicant for the purpose of future notification of biosolids management activities.

On written request of the person seeking to have their name added to the list of interested parties, all facilities maintaining a list of interested persons or organizations under (b)(x) of this subsection must provide written confirmation by certified mail, return receipt requested, to each interested person or organization that their name has been placed on the list.

(xi) Any additional information considered necessary or proper.

(c) Except as provided in (d) of this subsection, public notice for a new or expanded land application site that is being proposed in accordance with an approved general land application plan must be satisfied as follows:

(i) If site specific local approval is required to be obtained through integrated project review under the State Growth Management Act and the substantive notice requirements of (b) of this subsection are met, public notice for the purposes of this rule will be satisfied by compliance with the public notice requirements of the local integrated project review process;

(ii) Public notice conducted in accordance with the State Environmental Policy Act satisfies the public notice requirements of this rule for new or expanded land application sites if the substantive requirements of (b) of this subsection are met and the site is specifically identified in an environmental checklist that is available for public review and comment;

(iii) The public notice process for new or expanded land application sites not applicable under (c)(i) or (ii) of this subsection must meet the requirements of (a)(ii) through (v) and (b) of this subsection.

(d) Facilities that will provide biosolids to a permitted beneficial use facility must conduct public notice in accordance with this subsection as follows:

(i) Public notice must be given when applying for an individual permit or for coverage under a general permit;

(ii) Other than sites that are part of a beneficial use facility, public notice must be given for all new or expanded sites where biosolids not meeting the criteria to be classified as exceptional quality will be applied to the land;

(iii) Facilities that provide biosolids to a permitted beneficial use facility are not required to carry out public notice specific to the land application of biosolids at the beneficial use facility if:

(A) Public notice given for the beneficial use facility identified the facility providing the biosolids; or

(B) Public notice given for the beneficial use facility clearly stated that biosolids would be accepted from unknown sources, including sources outside of the county in which the beneficial use facility is located, as applicable.

(e) Facilities applying for individual permits must complete the public notice requirements in this subsection at the

time they apply for a permit and at the time when a draft permit is provided for formal review by the department.

(12) **Public hearings and meetings.**

(a) The department may require an applicant to hold a public hearing or meeting when applying for coverage under a general permit, for an individual permit, or for any land application plan if it finds, on the basis of requests, a significant degree of public interest, or that a public discussion might clarify one or more aspects important to compliance with the requirements of this chapter or an applicable permit.

(b) During the public comment period provided for in subsection (11) of this section, any person may request the department to require a public hearing or meeting if none has been scheduled. Any request for a public hearing or meeting must be in writing and must state the nature of the issues proposed to be raised. The department will consider all requests that are received not later than the final comment date specified in the notice required under subsection (11)(b) of this section.

(c) Notice of hearing. If the department determines that a public hearing must be held, the applicant must give notice of a public hearing in accordance with the procedures in subsection (11)(a) and (b) of this section, except that posting of sites that are not specifically subject to the hearing is not required.

(i) The notice of hearing must contain the following information:

(A) The dates of previous public notices relating to the permit application;

(B) The date, time, and place of the hearing;

(C) A brief description of the nature and purpose of the hearing, including any rules and procedures that apply.

(ii) Copies of the notice and an explanation of all places where and when the notice was published must be submitted to:

(A) The contact person in the regional or headquarters office of the department of ecology that has lead responsibility for the permit; and

(B) Any applicable local health department that has accepted delegation of authority under WAC 173-308-050.

(d) Public hearings required under this subsection, must be held in each county where biosolids will be treated or applied to the land, unless otherwise allowed by the department.

(e) Public hearings required under this subsection must be held no sooner than thirty days after the final notice of public hearing published in accordance with subsection (11)(a)(i) of this section, and at a time and place as can be reasonably expected to be convenient to the department and interested parties.

Public hearings must be attended by a representative of the permit applicant who is authorized to respond to questions from the public and the department, and by a representative of the department.

(f) Notice conducted for public meetings is the same as that required for public hearings unless otherwise allowed by the department.

(13) **Record and response to comments received.**

(a) The department will maintain a record of all written comments received during the public comment period in subsection (11) of this section, and of all comments properly submitted in response to a public hearing required under subsection (12) of this section.

(b) The department will prepare a response to all relevant comments received, and will briefly describe any changes that resulted (other than editorial changes) to an individual permit or to an applicant's coverage under a general permit.

(c) The department is not obligated to consider or respond to comments or information that is received later than thirty days after the initial date of publication of public notice, or the date of a public hearing, whichever is later.

(14) **Additional requirements.** In addition to the requirements of this chapter, the department may impose additional requirements as part of the approval process for coverage under a general permit or as conditions of an individual permit if any of the conditions in subsection (1)(b)(i) through (iv) of this section are met.

(a) Any additional requirements imposed under this subsection are considered to be permit requirements, fully enforceable in accordance with the provisions of this chapter and the applicable permit.

(b) If known, any additional requirements must be disclosed at a public hearing if a public hearing is held, or if imposed subsequent to a public hearing, must become a part of the written record required under subsection (13)(b) of this section.

(15) **Compliance schedules.**

(a) A permit may specify a schedule leading to compliance with the federal Clean Water Act and these regulations. Any compliance schedule under this section must require compliance as soon as possible, but not later than any applicable statutory deadline under the Clean Water Act or chapter 70.95J RCW.

(b) Interim dates. If a permit establishes a compliance schedule that exceeds one year from the date of permit issuance, the schedule must set forth interim requirements and the date for their achievement. The time between interim dates must not exceed six months.

(c) Reporting. The permit must require that no later than fourteen days after each interim date and the final date of compliance, the permittee must notify the department in writing of its compliance or noncompliance with the interim or final requirements.

(16) **Fact sheet required for individual permits.**

(a) The department must prepare a fact sheet for every draft individual permit for a class I biosolids management facility, for every draft individual permit requiring permit conditions developed on a case-by-case basis to implement section 405(d)(4) of the Clean Water Act, for every draft individual permit that includes a general land application plan under subsection (6)(b)(iii) of this section, and for every draft individual permit that the director finds is the subject of widespread public interest or raises major issues. The fact sheet must briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The director must send this fact sheet to the applicant and, on request, to any other person.

(b) The fact sheet must include:

(i) A brief description of the type of facility or activity that is the subject of the draft permit;

(ii) Any calculations or other necessary explanation of the derivation of conditions for biosolids use and disposal, including a citation to the applicable standards for biosolids use or disposal and reasons why they are applicable, or in the case of conditions developed on a case-by-case basis to implement section 405 (d)(4) of the Clean Water Act, an explanation of, and the bases for the conditions; and

(iii) For permits that include a general land application plan under subsection (6)(b)(iii) of this section, a brief description of how each of the required elements of the land application plan is addressed in the permit.

(17) **Approval of coverage.** After reviewing an application for an individual permit or for coverage under a general permit, and considering other pertinent information including any testimony received during a public hearing or meeting, or written comments submitted in response to a public notice, the department may approve coverage under a general permit or issue an individual permit.

(a) If coverage under a general permit is approved or an individual permit is issued, the department will notify the applicant in writing, conveying a final copy of the issued permit including any additional requirements or stipulations that are imposed as a condition of coverage under a general permit.

(b) If an application for an individual permit or for coverage under a general permit is disapproved, the department will notify the applicant in writing, including an explanation of why coverage was disapproved.

(c) On and after the effective date of this chapter, if there are no significant changes to biosolids management practices at an existing site, a facility may continue to apply biosolids to sites that were permitted by the local health department before the effective date of this chapter, in accordance with the requirements of the local health department, the applicable general permit, and this chapter, unless the department objects in writing.

(i) Facilities applicable under (c) of this subsection that have submitted a notice of intent to be covered or have been notified that they are covered under a general permit, and those that have applied for coverage under a general permit, are provisionally approved for coverage under an applicable general permit to apply biosolids to existing sites as permitted by the local health department and in accordance with the requirements of the applicable general permit and this chapter.

(ii) A beneficial use facility may not obtain provisional approval for coverage under a general permit, but may obtain provisional approval for existing land application sites after being permitted as a beneficial use facility.

(d) Except for provisionally approved facilities under this subitem (d), a facility may not engage in new biosolids management practices or implement significant changes to biosolids management practices at existing sites, or apply biosolids to new or expanded sites until all applicable requirements of this section including those for public notice, and public hearings or meetings, have been satisfied.

Facilities that have submitted a notice of intent or that have been notified of coverage under a general permit, or that have applied for coverage under a general permit, are provisionally approved for coverage under an applicable general permit to apply biosolids to sites consistent with the applicable requirements of this chapter and the applicable general permit and as approved by the local health department, if the public notice requirements under subsection (11) of this section have been fulfilled, and no request for a public hearing has been made or the department has denied the request, and all comments received have been resolved to the satisfaction of the local health department;

(e) Facilities with provisional approval are subject to further review and permitting requirements at a later date, and are subject at all times to all applicable conditions of this chapter and the applicable general permit.

(f) In no case may a lack of action by the department be construed as relieving an applicant of the obligation to comply with any of the provisions of this chapter or an applicable general permit, or as approving final use or disposal practices that are not consistent with the provisions of this chapter or an applicable general permit, or that pose a threat to human health or the environment.

(18) **Prohibition.** The department may not issue a permit when the Regional Administrator of EPA has objected in writing under 40 CFR 123.44.

(19) **Duration of permits.**

(a) Permits are issued for fixed terms, up to but not exceeding five years from the effective date of the permit.

(i) Coverage under a general permit may be issued for a period up to the remaining term of issuance for the permit.

(b) The term of a permit may not be extended by modification beyond five years.

(20) **Transfer of permit coverage.**

(a) Except as provided in (b) of this subsection, a permit may be transferred by the permittee to a new owner operator only if the permit has been modified or revoked and reissued to identify the new permittee and incorporate other requirements as may be necessary to assure compliance with the requirements of this chapter.

(b) Coverage under a permit is automatically transferred from the old permittee to a new permittee, on the date agreed to, if:

(i) A written, signed agreement, between the old and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability is submitted in accordance with the requirements of subsection (7) of this section at least thirty days in advance of the proposed date of transfer; and

(ii) The department has not notified both permittees of any objection to the transfer, or of the intent to revoke coverage under the general permit.

(c) No condition or requirement of a permit or this chapter may be waived by the transfer of permit coverage from one party to another.

(21) **Modification or revocation and reissuance of individual permits and modification of conditions of coverage under a general permit.**

(a) When the department receives any information (for example, upon inspection of a facility, receipt of information submitted by the permittee as required in the permit, receipt of a request for modification or revocation and reissuance, or upon a review of the permit file), the department may deter-

mine whether or not one or more of the causes listed in (b) or (c) of this subsection for modification or revocation and reissuance, or both, exist.

(i) If cause for modification or revocation and reissuance, or both, exists, the department may modify or revoke and reissue an individual permit, or modify conditions of coverage or revoke and reissue coverage under a general permit, and may request an updated application if necessary.

(ii) When an individual permit or conditions for coverage under a general permit is/are modified, only the conditions subject to modification are reopened.

(iii) If an individual permit or authorization for coverage under a general permit is revoked and reissued, the entire individual permit or consideration of coverage under a general permit is reopened and subject to revision, and the individual permit or coverage under the general permit may be reissued for a new term.

(iv) If cause does not exist under this section, the department may not modify or revoke and reissue an individual permit or conditions of coverage under a general permit.

(b) Causes for modification. The following are causes for modification but not revocation and reissuance of individual permits or authorization of coverage under a general permit except when the permittee requests or agrees.

(i) Alterations. There are material and substantial alterations or additions to the permitted facility or activity that occurred after permit issuance that justify the application of permit conditions that are different from or absent in the existing permit.

(ii) Information. The department has received new information. Individual permits or authorization of coverage under a general permit may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

(iii) New regulations. New regulations have been adopted or the standards or regulations on which the permit was based have been changed by adoption of amended standards or regulations or by judicial decision after the permit was issued.

(iv) Compliance schedules. The department determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonable available remedy. However, in no case may a compliance schedule be modified to extend beyond an applicable Clean Water Act statutory deadline.

(v) Land application plans. When required by a permit condition to incorporate a general land application plan for beneficial use of biosolids, to revise a general land application plan, or to add a general land application plan.

(c) The following are causes to modify or alternatively, revoke and reissue, an individual permit or the conditions for coverage under a general permit.

(i) Cause exists for termination under subsection (22) of this section and the department determines that modification or revocation and reissuance is appropriate.

(ii) The department has received notification of a proposed transfer of the permit.

(d) When an individual permit or coverage under a general permit is modified or revoked and reissued, the public notice requirements of subsection (11) of this section, and if required the public hearing requirements of subsection (12) of this section must be complied with for the reopened conditions or reissued permit.

(22) **Termination of permits.** The following are causes for terminating an individual permit or coverage under a general 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;

(c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(d) A change in any condition that requires either a temporary or a permanent reduction or elimination of any activity controlled by the permit.

(23) **Enforcement.** Any violation of this chapter or any permit issued under this chapter, may be subject to the enforcement provisions of applicable law, including chapters 70.95 and 70.95J RCW.

(24) **Appeals.** Any person aggrieved by a decision of the department made in accordance with provisions of this chapter may appeal that decision only as provided by applicable law, including chapters 43.21B RCW and 34.05 RCW.

(25) **Requirement to coordinate permitting with delegated local health departments.** When a local health department has received delegation to administer any portion of, or to carry out any activity required under this chapter, all facilities subject to permitting under this chapter must cooperate with the department and the local health department by coordinating permitting activities so as to assure an opportunity for local health department involvement consistent with the terms of the delegation agreement.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-310, filed 2/18/98, effective 3/21/98.]

WAC 173-308-320 Permit fees. (1) All facilities that are required to obtain a permit under this section must pay an annual biosolids permit fee to the department of ecology.

(2) Biosolids permit fees are assessed prospectively on an annual basis and apply regardless of the date of issuance of a permit.

(3) Biosolids permit fees are assessed and collected for fiscal years and are due and payable within forty-five days after the department mails a billing statement.

(a) Failure to pay a permit fee is cause for denial of coverage under a permit or revocation of existing coverage. Fees are considered delinquent if they are not received by the first invoice billing due date. Permit holders will be notified by certified letter and have thirty days to bring their account up-to-date before further action is taken by the department.

(b) The department may at its discretion mail partial billing statements two or more times per year, in which case a facility is responsible only for the amount reflected on the current (and any past due) billing statement.

(c) Receiving-only facilities, centralized septage treatment facilities, and persons who apply septage to the land that determine a residential equivalent value under subsection (4)(b) or (c) of this section may submit periodic payments as provided in (c)(i), (ii), and (iii) of this subsection, based on the actual level of service, provided that they submit a letter to the department indicating their intent to do so.

(i) Facilities under (c) of this subsection must submit a quarterly payment and statement of actual service level within ten days of the end of each quarter (not later than the 10th day of March, June, September, and December of each year), except as provided in (c)(ii) or (iii) of this subsection.

(ii) Facilities under (c) of this subsection that estimate and provide a level of service less than three hundred residential equivalents per year are subject to a fee of $0.00 per residential equivalent and are not required to submit periodic payments, but must submit a statement of actual service level at least once per year.

(iii) Facilities under (c) of this subsection that calculate an annual residential equivalent value equal to or greater than three hundred residential equivalents per year may withhold a payment for any quarter where the total amount due is less than fifty dollars, provided a statement of the actual service level is submitted and that all accounts are brought up-to-date by July 10th of each year.

(4) The permit fee schedule is based on the number of residences or residential equivalents (residential equivalent value) contributing to a permittee's biosolids management system, and incorporates the annual fiscal growth factor calculated under chapter 43.135 RCW.

(a) For facilities with NPDES permits issued under chapter 173-220 WAC or state waste discharge permits issued under chapter 173-216 WAC, the department will use residential equivalent values determined under chapter 173-224 WAC.

(b) The residential equivalent value for receiving-only facilities other than septage facilities in (c) of this subsection is the sum of the fraction of residential equivalent values contributed from all sources, as determined by considering the portion of the current annual biosolids production of each originating source that is provided to the receiving facility.

A receiving-only facility must determine an estimated residential equivalent value based on projected capacity as detailed in the permit application submitted under WAC 173-308-310 and the method described in (b) of this subsection.

(c) For centralized septage treatment facilities and persons who apply septage to the land, 1,250 gallons of septage received for treatment or applied to the land is equal to one residential equivalent as shown in Equation (4).

$$REV = \frac{\text{Gallons of septage received or applied to the land}}{\text{1,250 Gallons per Residental Equivalent}} \quad \text{Equation (4)}$$

A centralized septage treatment facility and a person who applies septage to the land must determine an estimated residential equivalent value based on projected capacity as detailed in the permit application submitted under WAC 173-308-310 and the method described in (c) of this subsection.

(d) Equation (5) below is used to calculate permit fees:

$$\text{Permit Fee} = (REV \times \text{Cost per } RE_{FGF}) \text{ where:} \quad \text{Equation (5)}$$

(i) REV = residential equivalent value.

(ii) FGF = An annual fiscal growth factor expressed as a percentage, as determined under chapter 43.135 RCW.

(iii) Cost per RE_{FGF} = cost per residential equivalent in dollars including a fiscal growth factor. The cost per RE_{FGF} is obtained by multiplying the cost per residential equivalent in the preceding year by the current year's fiscal growth factor as follows in (6):

$$\text{Cost per } RE_{FGF} = \text{Previous year's cost per RE} \times [1 + (FGF)] \quad \text{Equation (6)}$$

For implementation of the fiscal growth factor, the base year for all biosolids permit fees will be fiscal year 1998, ending June 30, 1998. In the base year, the FGF will be zero.

(e) Unless a lower cost is specified in a permit, the cost per residential equivalent in the base year will be as follows:

(i) $0.00 per residential equivalent for any permit for any facility with a total residential equivalent value of less than 300, including those that would otherwise fall under (e)(ii) through (v) of this subsection.

(ii) $0.015 per residential equivalent for a permit authorizing municipalities that own or operate incinerators that fire municipal sewage sludge to dispose of municipal sewage sludge generated by their own facility in a municipal solid waste landfill or through another facility on an emergency basis.

(iii) $.20 per residential equivalent for permits authorizing disposal in a municipal solid waste landfill, except for facilities under (e)(ii) of this subsection.

(iv) $0.04 per residential equivalent for permits issued to receiving-only facilities as defined in WAC 173-308-080.

(v) $0.162 per residential equivalent for permits authorizing any other type of biosolids management activity, including but not limited to the following:

(A) Direct beneficial use by a treatment works treating domestic sewage;

(B) Transfer from one facility to another facility, including delivery of biosolids to an incinerator from nonincinerating jurisdictions;

(C) Prolonged treatment or storage, including lagoon systems;

(D) Treatment or land application of septage.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-320, filed 2/18/98, effective 3/21/98.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-308-900 Appendix A—Procedure to determine the annual whole biosolids application rate. When biosolids are sold or given away in a bag or other container for application to the land, and any of the pollutant concentration limits in Table 3 of WAC 173-308-160 are exceeded, the mathematical product of the concentration in the biosolids of each pollutant listed in Table 4 of WAC 173-308-160 and the annual whole biosolids application rate (AWBAR) must not

cause the annual pollutant loading rate for the pollutant in Table 4 of WAC 173-308-160 to be exceeded. This appendix contains the procedure used to determine an AWBAR that does not cause the annual pollutant loading rates in Table 4 of WAC 173-308-160 to be exceeded. The relationship between the annual pollutant loading rate (APLR) for a pollutant and the annual whole biosolids application rate (AWBAR) is shown in equation (7).

$$APLR = C^* AWBAR * 0.001 \qquad \text{Equation (7)}$$

Where:
APLR = Annual pollutant loading rate in kilograms per hectare per 365 day period.

C = Pollutant concentration in milligrams, per kilogram of total solids (dry weight basis).

AWBAR = Annual whole biosolids application rate in metric tons per hectare per 365 day period (dry weight basis).

0.001 = A conversion factor.

To determine the AWBAR, equation (7) is rearranged into equation (8):

$$AWBAR = \frac{APLR}{C * 0.001} \qquad \text{Equation (8)}$$

The procedure used to determine the AWBAR is presented below.

Procedure:

1. Analyze a sample of the biosolids to determine the concentration for each of the pollutants listed in Table 4 of WAC 173-308-160.

2. Using the pollutant concentrations from Step 1 and the APLRs from Table 4 of WAC 173-308-160, calculate an AWBAR for each pollutant using equation (8).

3. The correct AWBAR is the lowest AWBAR calculated in Step 2.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-900, filed 2/18/98, effective 3/21/98.]

Chapter 173-310 WAC
LITTER RECEPTACLES

WAC

WAC 173-310-010 Purpose. By the provisions of chapter 70.93 RCW, the department of ecology has been delegated authority to conduct a permanent and continuous program to control and remove litter from this state to the maximum practical extent possible. The purpose of this chapter is to provide minimum standards for litter receptacles and to prescribe the use, placement and distribution of litter receptacles throughout the state, under the authority set forth in RCW 70.93.040 and 70.93.090.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-010, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-010, filed 5/15/72, effective 9/1/72.]

WAC 173-310-020 Definitions. The following words and phrases as used herein have the following meanings, unless context clearly dictates otherwise:

(1) "Anti-litter symbol" means the standard symbol adopted herein by the department.

(2) "Department" means the Washington state department of ecology.

(3) "Litter" means all waste materials including, but not limited to, disposable packages or containers susceptible to being dropped, deposited, discarded or otherwise disposed of upon any property in the state, and solid waste that is illegally dumped, but not including the wastes of primary processes of mining, logging, sawmilling, farming or manufacturing.

(4) "Litter receptacle" means containers for the disposal of litter of not more than 60-gallon capacity: Provided, That special containers of larger capacity such as those referred to as "dumpsters," and garbage containers, or other waste containers serving single or multifamily residences are not included within this definition and their use is in no way regulated or affected by this chapter.

(5) "Person" means any industry, public or private corporation, copartnership, association, firm, individual, or other entity whatsoever.

(6) "Public place" means any area that is used or held out for the use of the public whether owned and operated by public or private interests, but not including indoor areas. An indoor area means any enclosed area covered with a roof and protected from moisture and wind.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-020, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-020, filed 5/15/72, effective 9/1/72.]

WAC 173-310-030 Responsibility to obtain and place litter receptacle. It is the responsibility of any person owning or operating any establishment or public place in which litter receptacles are required by this chapter to obtain, place and maintain litter receptacles at their own expense on the premises in accordance with the provisions of this chapter.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-030, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-030, filed 5/15/72, effective 9/1/72.]

WAC 173-310-040 Litter receptacles, where required. Litter receptacles meeting the standards established by this chapter must be placed in the following public places in the state:

(1) Along public highways lying outside the limits of incorporated cities and towns;

(2) Parks;

(3) Campgrounds;

(4) Trailer park facilities for transient habitation;

(5) Drive-in restaurants;

(6) Gasoline service stations;
(7) Tavern parking lots;
(8) Shopping centers;
(9) Grocery store parking lots;
(10) Marinas;
(11) Boat launching areas;
(12) Boat moorage and fueling stations;
(13) Public and private piers
(14) Beaches and bathing areas;
(15) Outdoor parking lots, other than those specifically designated above, that have a capacity of more than 50 automobiles;
(16) Fairgrounds;
(17) Schoolgrounds;
(18) Racetracks;
(19) Sporting event sites with seating capacity for more than 200 spectators;
(20) Sites for carnivals, festivals, circuses, shows or events of any kind to which the public is invited;
(21) Business district sidewalks.

Litter receptacles must be placed in the above public places only during times those places or the events held at them are open to the public.

Litter receptacles must be placed in conformance with laws, ordinances, resolutions and rules pertaining to fire, safety, public health or welfare.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-040, filed 9/8/00, effective 10/9/00; Order 73-7, § 173-310-040, filed 4/23/73; Order 72-10, § 173-310-040, filed 5/15/72, effective 9/1/72.]

WAC 173-310-050 Number of litter receptacles required. The minimum number of receptacles meeting the standards established by this chapter required in public places listed in the preceding section is as follows:

(1) Along public highways lying outside the limits of incorporated cities and towns - one receptacle at each rest area, view point or similar turnout, officially designated as such by the primary jurisdictional authority;

(2) Parks, campgrounds and trailer park facilities for transient habitation - one receptacle at each public restroom facility, and one receptacle at each established trailhead that gives access by foot, motorcycle, bicycle or a similar trail for excursion or exploration out of or away from the central activity area;

(3) Gasoline service stations - one litter receptacle placed in plain view of each gasoline service island, with a minimum of one receptacle for each side of the station on which gasoline pumps are located;

(4) Drive-in restaurants, tavern parking lots, shopping centers, grocery store parking lots and outdoor parking lots that have a capacity of more than 50 automobiles - one receptacle, plus one additional receptacle for each 200 parking spaces in excess of 50 spaces;

(5) Marinas, boat launching areas, boat moorage and fueling stations and public and private piers - one receptacle at each area;

(6) Beaches and bathing areas - one receptacle at each public restroom facility, and one receptacle at each access point officially designated as such by the primary jurisdictional authority;

(7) Schoolgrounds - one receptacle at each schoolground bus loading zone officially designated as such by the primary jurisdictional authority;

(8) Racetracks and sporting event sites with seating capacity for more than 200 spectators - one receptacle, plus one additional receptacle for each 1000 seating capacity in excess of 200;

(9) Fairgrounds and sites for carnivals, festivals, circuses, shows or events of any kind to which the public is invited - one receptacle at the entrance to each ride, and one receptacle at each end of walk-through exhibit buildings;

(10) Along the sidewalks of business districts of incorporated cities and towns - one receptacle per 800 feet of sidewalk curbing.

No variance from the provisions of this section may be allowed except with the express permission of the department of ecology.

Notwithstanding the minimum requirements of this section, any public place in which litter receptacles meeting the standards of this chapter are required that is found to have an accumulation of uncontained litter under circumstances that the person responsible for placing receptacles could have reasonably anticipated the litter is deemed to have an insufficient number of receptacles to be in compliance with this rule.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-050, filed 9/8/00, effective 10/9/00; Order DE 76-34, § 173-310-050, filed 9/13/76; Order 73-7, § 173-310-050, filed 4/23/73; Order 72-10, § 173-310-050, filed 5/15/72, effective 9/1/72.]

WAC 173-310-060 Minimum standards. Litter receptacles obtained and placed in public places as required by this chapter shall meet the following minimum standards:

(1) General specifications.

(a) The body of each litter receptacle must be constructed of a minimum of 24-gauge galvanized metal or other material of equivalent strength, that will with normal wear and tear, reasonably resist corrosion and acts of vandalism.

(b) All outside edges of each litter receptacle must be rounded.

(c) Openings in covered litter receptacles must be readily identifiable and readily accessible for the deposit of litter.

(d) Construction and general configuration of litter receptacles must be in conformance with all pertinent laws, ordinances, resolutions or rules pertaining to fire, safety, public health or welfare.

(2) Color and marking.

(a) The entire outer surface of each litter receptacle must be colored medium green conforming with Federal Color Standard No. 595A, Color No. 24424, or Color No. 34424.

(b) Each litter receptacle shall bear the official anti-litter symbol, as adopted herein. The symbol must be colored deep blue conforming with Federal Color Standard No. 595A, Color No. 15180. The symbol may not be distorted as to proportion and may not be incorporated into a commercial advertisement on the receptacle. For litter receptacles along the right-of-way of public highways, the symbol must be of a size so as to be distinguishable from a minimum distance of 75 feet.

(c) The words **"Deposit Litter"** must be placed on the litter receptacle. Lettering used for these two words must be block-type capital letters to be readily legible at a distance of 30 feet.

(d) No commercial advertisement may be placed on any litter receptacle. However, the person owning any receptacle may place a single line on the receptacle identifying his ownership, and a single credit line designating any donor of the litter receptacle other than the owner may also be placed on the receptacle: Provided, That the lettering does not exceed the size specified for the words **"Deposit Litter,"** and does not interfere with or distract from the prominence of the anti-litter symbol.

(3) Maintenance. Compliance with these minimum standards shall include proper upkeep, maintenance and repair of litter receptacles sufficient to permit the receptacles to serve the functions for which they were designed and to prevent the appearance of the receptacles from becoming unsightly. Inadequately maintained or unsightly litter receptacles are in violation of these minimum standards.

(4) Wherever litter receptacles are placed in any public place other than where required by this chapter, the receptacles shall conform to the provisions of this chapter.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-060, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-060, filed 5/15/72, effective 9/1/72.]

WAC 173-310-070 Anti-litter symbol. The official state anti-litter symbol is the symbol depicted in Appendix A to this chapter and shall conform to the Federal Color Standard No. 595A, Color No. 15180, which appendix is hereby incorporated into this chapter and made part hereof. Permission to use this symbol in the manner required by this chapter has been obtained from the copyright holder and any other use without the express permission of the copyright holder is prohibited.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-070, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-070, filed 5/15/72, effective 9/1/72.]

WAC 173-310-080 Prohibited acts. (1) No person may damage, deface, abuse or misuse any litter receptacle not owned by him or her so as to interfere with its proper function or to detract from its proper appearance.

(2) No person may deposit leaves, clippings, prunings or gardening refuse in any litter receptacle.

(3) No person may deposit household garbage in any litter receptacle: Provided, That this subsection may not be construed to mean that wastes of food consumed on the premises at any public place may not be deposited in litter receptacles.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-080, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-080, filed 5/15/72, effective 9/1/72.]

WAC 173-310-090 Penalties. Penalties for violation of this chapter must be imposed in accordance with chapter 70.93 RCW.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-090, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-090, filed 5/15/72, effective 9/1/72.]

WAC 173-310-100 Effective date and compliance. (1) This chapter shall become effective on September 1, 1972.

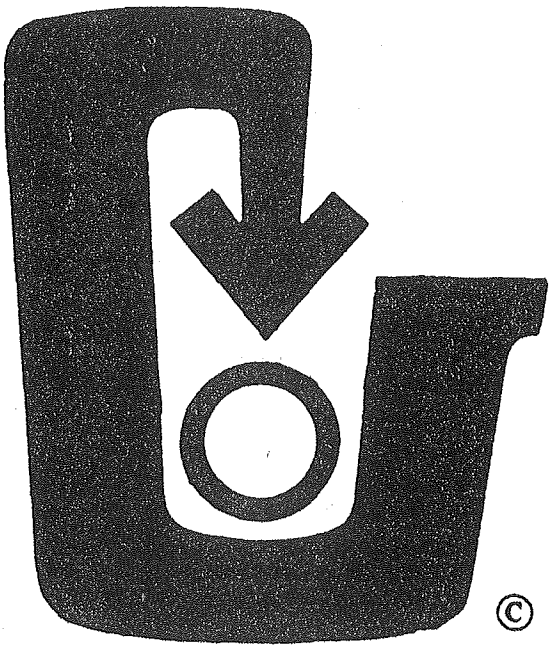
(2) All litter receptacles in any public place designated in this chapter that are placed after the effective date hereof shall conform to the provisions of this chapter.

(3) Litter receptacles in any public place designated in this chapter that were in place before the effective date hereof must be modified to conform with marking requirements of this chapter no later than January 1, 1973.

(4) All litter receptacles in any public place designated in this chapter must be modified or replaced so as to fully conform with all requirements of this chapter no later than July 1, 1975.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-100, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-100, filed 5/15/72, effective 9/1/72.]

WAC 173-310-990 Appendix A—Anti-litter symbol.



[Order 72-10, Appendix A (codified as WAC 173-310-990), filed 5/15/72, effective 9/1/72.]

Chapter 173-312 WAC
COORDINATED PREVENTION GRANTS

WAC

WAC 173-312-010 Purpose and authority. (1) The purpose of this chapter is to set forth requirements for the conduct of a financial assistance program to provide grants to local governments for local hazardous waste plans and programs and solid waste plans and programs, under the Model Toxics Control Act, RCW 70.105D.070(3). The plans and programs referenced in RCW 70.105D.070(3) are designed to prevent or minimize environmental contamination. Therefor, the grants are designated "coordinated prevention grants" under this chapter.

(2) A further purpose of this chapter is to establish a structure for the administration of coordinated prevention grants funded from the local toxics control account authorized by RCW 82.21.030. The administrative structure may be extended to other waste management grant programs using other funding sources including the litter control account authorized by chapter 70.93 RCW, the hazardous waste assistance account authorized by chapter 70.95E RCW, and other waste management funding sources that may be established in the future by the legislature.

(3) The purposes of the coordinated prevention grants program are to:

(a) Consolidate all grant programs funded from the local toxics control account, and other programs in subsection (2) of this section that may be selected, into a single program, except for remedial action, public participation, and citizen proponent negotiations grants.

(b) Promote regional solutions and intergovernmental cooperation.

(c) Prevent or minimize environmental contamination by providing financial assistance to local governments to help them comply with state solid and hazardous waste laws and rules.

(d) Provide funding assistance for local solid and hazardous waste planning and for implementation of some programs and projects in those plans.

(e) Encourage local responsibility for solid and hazardous waste management.

(f) Improve efficiency, consistency, reliability, and accountability of grant administration.

Note: Copies of all cited statutes, rules, and guidelines are available at the Department of Ecology, Records Management, P.O. Box 47600, Olympia, Washington 98504-7600.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-010, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-010, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-010, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-010, filed 9/4/90, effective 10/5/90. 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 Definitions. "Cash expenditure" means any cash outlay by the recipient, regardless of the source of funds, for direct costs of goods and/or services; salaries and benefits of recipient employees, including force account; overhead cash; and payments made to contractors.

"Department" means the department of ecology.

"Grant" means the portion of the project costs borne by the department.

"In-kind contributions" are property or services that benefit a project and that are contributed by a third party, without direct monetary compensation, to the recipient (or to any contractor under the agreement). In-kind contributions include donated or loaned real or personal property, volunteer services, and employee services donated by a third party.

"Incineration" means a process of reducing the volume of solid waste by use of an enclosed device using controlled flame combustion, operating under federal and state environmental laws and rules.

"Interlocal costs" are in-kind contributions made to a project by another local government under a valid written agreement between the recipient and the other government that details the work to be accomplished, the goods and services to be provided, and the value thereof. If the recipient reimburses another governmental entity for any portion of its contributions, the amount paid to the other entity is not an interlocal cost. It is a cash expenditure on the part of the recipient. Only the nonreimbursed portion of the other governmental entity's contributions is an interlocal cost.

"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.

"Lead implementation agency" means the agency designated in the adopted local solid or hazardous waste plan as having the principal responsibility for the execution of all or most of the plan, and/or the coordinating agency that delegates responsibility to other agencies to execute portions of the plan.

"Local government" 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.

"Local hazardous waste plan" means the plan to manage moderate-risk waste that a local government is required to prepare under RCW 70.105.220.

"Match" means that portion of the cash expenditures borne by recipient funds and interlocal costs.

"Moderate-risk waste" means (a) any waste that exhibits any of the properties of hazardous waste but is exempt from regulation under chapter 70.105 RCW solely because the waste is generated in quantities below the threshold for regulation, and (b) any household wastes that are generated from the disposal of substances identified by the department as hazardous household substances or substances that exhibit any of the properties of hazardous waste.

"Recipient" means the entity to which the funding is awarded and that is accountable for the use of the funds provided. The recipient is the entire legal entity even if only one component or department is designated in the agreement document.

"Recyclable materials" means those solid wastes separated for recycling or reuse, such as papers, metals and glass, that are identified as recyclable material under a local comprehensive solid waste plan.

"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration.

"Solid waste" or "wastes" 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 recyclable materials.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-020, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-020, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-020, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-020, filed 9/4/90, effective 10/5/90. Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-020, filed 8/4/88.]

WAC 173-312-030 Relation to other legislation and administrative rules. (1) This rule shall, together with chapters 173-322 and 173-321 WAC, and WAC 173-303-902, fulfill the requirement for rule making set forth in RCW 70.105D.070(7).

(2) The local government receiving a grant shall comply fully with all applicable federal, state, and local laws, orders, rules, and permits.

(3) Grants will be awarded within the limits of available funds. The obligation of the department to make grant payments is contingent upon the availability of funds through legislative appropriation and allotment, and other conditions not reasonably foreseeable by the department, which may render performance impossible.

(4) Nothing in this chapter may influence, affect, or modify existing department programs, rules, or enforcement of applicable laws relating to solid and hazardous waste management and cleanup.

(5) All grants are subject to existing applicable accounting and auditing requirements of state laws and rules.

[Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-030, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-030, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-030, filed 9/4/90, effective 10/5/90. 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 Applicant eligibility. (1) Eligibility for solid waste planning grants. Counties that are required by chapter 70.95 RCW to adopt or update local solid waste plans are eligible to apply for coordinated prevention grants to help pay for those plans. This eligibility extends to cities that have submitted an independent city plan, a joint city plan, or joint city-county plan to the department by the effective date of this rule. This eligibility also extends to any city subsequently requesting funding for the preparation of an independent plan, if the city provides for disposal sites wholly within its jurisdiction.

(2) Eligibility for solid waste enforcement grants. Jurisdictional health departments/districts are eligible to apply for coordinated prevention grants to pay for the enforcement of rules adopted under chapter 70.95 RCW.

(3) Eligibility for solid waste implementation grants. Counties whose solid waste plans are adopted and approved by the department as required by chapter 70.95 RCW are eligible to apply for coordinated prevention grants to help pay for the implementation of waste reduction and recycling projects in the most recently approved and adopted plan: Provided, That those projects are eligible as defined in WAC 173-312-050. This eligibility also extends to cities that are eligible for funding to do local solid waste plans or updates as provided by subsection (1) of this section.

If the adopted plans designate lead implementation agencies to implement the plans, those agencies are also eligible to apply for coordinated prevention grants.

(4) Eligibility for hazardous waste planning grants. Local governments that are required by chapter 70.105 RCW to adopt or update local hazardous waste plans are eligible to apply for coordinated prevention grants to help pay for those plans.

(5) Eligibility for hazardous waste plan implementation grants. Local governments with department-approved local hazardous waste plans as required by chapter 70.105 RCW are eligible to apply for coordinated prevention grants to help pay for the implementation of projects in the plan. If the plans designate lead implementation agencies to implement the plans, those agencies are also eligible to apply for coordinated prevention grants.

(6) Any grant-eligible entities as defined in this section may submit their requests in a coordinated application as described in WAC 173-312-060 (4)(a), or may submit separate applications as provided in WAC 173-312-060 (4)(b).

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-040, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-040, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-040, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-040, filed 9/4/90, effective 10/5/90. 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 Project eligibility. (1) Eligible project costs are those costs which are necessary and reasonable to fund required local planning and the implementation of some projects and programs contained in those plans, including innovative approaches implementing policies of the plan. These are:

(a) Local hazardous waste planning as required by chapter 70.105 RCW.

(b) Local solid waste planning as required by chapter 70.95 RCW.

(c) Local hazardous waste plan implementation projects.

(d) Local solid waste enforcement by the jurisdictional health departments and districts.

(e) Local solid waste plan implementation projects, which are limited to waste reduction and recycling projects and programs.

(2) Eligible project costs do not include:

(a) Solid waste incinerator feasibility studies, construction, maintenance, or operation.

(b) New landfill construction or landfill expansion, or landfill upgrading at an operating facility to meet the requirements of chapters 173-350 and 173-351 WAC.

(c) Landfill closure as required by chapters 173-350 and 173-351 WAC.

(d) Garbage collection and disposal, except start-up and operational costs for waste reduction and recycling programs.

(e) Solid and hazardous waste expenses not directly related to compliance with state solid and hazardous waste laws and rules.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-050, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-050, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-050, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-050, filed 9/4/90, effective 10/5/90. Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-050, filed 8/4/88.]

WAC 173-312-060 Application process. (1) The department shall set forth in its grant guidelines the base funding levels estimated to be available for each county for coordinated prevention grants and the process by which applications will be submitted.

(2) The application must be submitted by the county agency or department having responsibility for solid waste, unless the county executive department selects another agency or department to submit the application.

(3) Coordinated prevention grant applications must:

(a) Include a commitment by the applicants to use local funds to match grant funds according to the requirements of WAC 173-312-090.

(b) Be for eligible projects as defined in WAC 173-312-050.

(c) Include a scope of work that is sufficiently detailed for the department to monitor grant performance.

(d) Include documentation that all cities in the county and lead implementation agencies that have approved the adopted local hazardous waste plan or solid waste plan have had the opportunity to request that projects that meet the requirements of WAC 173-312-050 be included in the application.

(4) To obtain coordinated prevention grant funding, a county shall submit an application, as defined herein:

(a) A coordinated grant application means that the county, the health department or district and any other grant eligible entities as defined in WAC 173-312-040 have reached agreement regarding the requested projects and funding allocations for both local solid and local hazardous waste plans and projects. Coordinated applications will receive financial incentives for administrative coordination set forth in WAC 173-312-080.

The coordinated application shall include a maximum grant request for no more than the base funding level for the county, plus the financial incentive.

(b) In the event a county fails to submit a coordinated application, indicating grant eligible entities have not reached agreement regarding projects and funding allocations, they will lose the incentive as set forth in WAC 173-312-080. This money shall be made available for supplemental funding as specified in WAC 173-312-080.

(5) The application must be signed, indicating approval by responsible officials from the county, local health department or district and any other grant-eligible entities as defined in WAC 173-312-040.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-060, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-060, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-060, filed 5/21/91, effective 6/21/91.]

WAC 173-312-070 Application evaluation. (1) In evaluating coordinated prevention grant applications, the department may require that funding of certain projects take precedence over other projects. The department will refer to the following priority order in evaluating projects:

(a) Required hazardous waste planning under chapter 70.105 RCW and required solid waste planning under chapter 70.95 RCW.

(b) Programs and projects to implement adopted local hazardous waste plans, including waste reduction and recycling.

(c) Solid waste enforcement programs.

(d) Programs and projects to implement adopted local solid waste plans, including waste reduction and recycling.

(2) The department will evaluate each application according to the extent to which it:

(a) Conforms to the adopted local hazardous waste and solid waste plans.

(b) Advances regional solutions and intergovernmental cooperation.

(c) Supports the state's goal to achieve a fifty percent recycling rate.

(d) Confers broad benefit on residents of the county, whether they reside in incorporated areas or unincorporated areas.

(e) Meets the needs of local government for projects that prevent environmental contamination from solid and hazardous waste.

(f) Uses the state's resources efficiently.

(g) For solid waste enforcement funding, takes into account the number of disposal sites and the geographic area requiring enforcement activity.

(3) The department may fund all or portions of a coordinated prevention grant application.

(4) The department may award grants to any local government in order to execute all or portions of a coordinated prevention grant program.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-070, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-070, filed 5/21/91, effective 6/21/91.]

WAC 173-312-080 Allocation of grant funding. (1) The department shall consider the following factors in calculating base funding levels, supplemental grant levels, and grant amounts for recipients:

(a) Projected and actual revenue to the local toxics control account, and other funding sources cited in WAC 173-312-010(2), as determined by the department.

(b) The number of people served by a local government.

(2) Grants that may be awarded to eligible cities under WAC 173-312-040 may not exceed a city's proportionate share, based on population, of a county's base funding level as defined in subsection (3)(a) of this section, unless the department, the county, the health department or district and

the grant-eligible entities as defined in WAC 173-312-040 agree otherwise.

(3) Projected revenues to the local toxics control account that are available each biennium for coordinated prevention grant purposes must be divided into two portions, one for solid waste enforcement grants, and one for solid and hazardous waste implementation grants. Allocations will be calculated as follows:

(a) For solid waste enforcement grants, an amount sufficient to provide each single-county jurisdictional health department with one hundred thousand dollars and each multi-county jurisdictional health department with one hundred fifty thousand dollars will be set aside. In future biennia the amount set aside for solid waste enforcement will be twenty percent of the total coordinated prevention grant allocation, and the single-county and multi-county solid waste enforcement grant allocation will be increased or decreased proportionately.

(b) For solid and hazardous waste implementation grants, the remaining eighty percent is divided among counties by means of a formula that shall consist of two elements:

(i) A fixed amount for each county, regardless of size; and

(ii) A per capita amount based on county population size as determined by the United States census data or by the official estimates of the state office of financial management.

(c) Counties that submit a coordinated application as defined in WAC 173-312-060 shall receive a ten percent increase if base level funding as defined in (b) of this subsection is an incentive.

(d) After initial grant amounts have been determined for both categories of coordinated prevention grants based upon the applications, the unallocated funds shall become supplemental funds used to promote strategic initiatives that meet needs defined by the state solid waste planning process. Supplemental funds for solid and hazardous waste implementation grants will first be awarded within the initial solid and hazardous waste implementation coordinated prevention grant portion. Supplemental funds for solid waste enforcement grants will first be awarded within the initial solid waste enforcement coordinated prevention grant portion. Only when supplemental funds still remain in either category after the initial supplemental awards have been given shall the funds be awarded to the other portion.

(4) Applicants must meet the requirements of this chapter to the satisfaction of the department in order to secure grant awards.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-080, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-080, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-080, filed 5/21/91, effective 6/21/91.]

WAC 173-312-090 State assistance share and local cash match. (1) Costs eligible under WAC 173-312-050 will be considered for grant funding at a level of seventy-five percent. Twenty-five percent of eligible costs must be provided as local cash match.

(2) Local cash match may be met by cash expenditures and interlocal costs. Interlocal costs are the only type of in-kind contributions that may be used for local cash match.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-090, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-090, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-090, filed 5/21/91, effective 6/21/91.]

WAC 173-312-100 Grant administration. (1) The department shall prepare guidelines to facilitate compliance with and interpretation of this rule.

(2) Coordinated prevention grants shall operate on a biennial funding cycle. Applications will be due in the first quarter of the biennium. Eligible applicant governments will apply for grant funds up to the base funding level set forth in WAC 173-312-080 plus the incentive, and at the same time shall submit requests for additional funds to assist ongoing or new projects. Supplemental funds, if awarded, shall be supplied as part of the new grant. New grants will begin in the third quarter of the biennium, and will run for two calendar years.

(3) The department will obligate coordinated prevention grant funds to a recipient for a maximum period of two years. If the recipient has not accomplished the scope of work in the time period set forth in the agreement, the recipient must use a portion of its next biennial base funding level to complete the project(s).

(4) No costs incurred before the effective date of a grant agreement are eligible unless specific provision is made in the grant agreement for those costs.

(5) All grants under this chapter must be consistent with Administrative Requirements for Ecology Grants and Loans WDOE #91-18 (Revised October 2000).

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-100, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-100, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-100, filed 5/21/91, effective 6/21/91.]

Chapter 173-313 WAC

LOCAL SOLID WASTE ENFORCEMENT GRANT REGULATION

WAC

WAC 173-313-010 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 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-010, filed 8/17/89, effective 9/17/89.]

WAC 173-313-020 Purpose and authority. The purpose of this regulation is to establish criteria by which the department of ecology shall allocate financial aid, pursuant to the Model Toxics Control Act, to jurisdictional health departments for enforcement of rules and regulations promulgated under chapter 70.95 RCW.

[Statutory Authority: RCW 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-020, filed 8/17/89, effective 9/17/89.]

WAC 173-313-030 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 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-030, filed 8/17/89, effective 9/17/89.]

WAC 173-313-040 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 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-040, filed 8/17/89, effective 9/17/89.]

WAC 173-313-050 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 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-050, filed 8/17/89, effective 9/17/89.]

Chapter 173-314 WAC
WASTE TIRE CARRIER AND STORAGE SITE LICENSES

WAC

WAC 173-314-010 Authority and purpose. By the provision of RCW 70.95.555 and 70.95.263, the department of ecology has been delegated authority to conduct a licensing program for waste tire carriers and storage site owners. The purpose of this chapter is to provide minimum standards for waste tire carriers and site owners that will result in the safe and proper storage, control, recovery, and recycling of tires throughout the state.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-010, filed 1/13/89.]

WAC 173-314-100 Definitions. The following words, terms, and phrases shall, for the purposes of this chapter, have the meanings given below:

(1) "Cab cards" means a license carried in a vehicle that authorizes that vehicle to legally pick up waste tires and haul to a permitted, licensed facility or an exempt facility for deposit.

(2) "Commission" means the Washington utilities and transportation commission.

(3) "County permit" means a permit issued by a local health district that allows for storage of waste tires at a place of business that does not constitute final disposal of the waste tires.

(4) "Department of licensing" means the Washington state department of licensing.

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

(6) "Disposal site" means the location where any final treatment, utilization, processing, or depository of solid waste occurs.

(7) "Dispose" means to deposit, dump, spill, or place any waste tire onto or under the surface of the ground or into the waters of this state.

(8) "Ecology" means the Washington state department of ecology.

(9) "Financial assurance" means a performance bond, a letter of credit, cash deposit, or insurance policy in favor of the state of Washington.

(10) "Landfill" means a disposal facility or part of a facility at which waste is placed in or on land and which is not a land treatment facility.

(11) "License" means the license issued by the department of licensing and approved by ecology as authorized by RCW 70.95.555 for any person engaged in the business of transporting or storing waste tires.

(12) "Person" means any individual, firm, association, copartnership, political subdivision, government agency, municipality, industry or private corporation, or any other entity whatever.

(13) "Retreader" means a person engaged in the business of recapping tire casings to produce recapped tires for sale to the public.

(14) "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.

(15) "Solid waste handling" means the management, storage, collection, transportation, treatment, utilization, processing, and 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.

(16) "State" means the state of Washington.

(17) "Storage" or "storing" means the placing of waste tires at a county permitted facility under conditions established in WAC 173-304-420 and chapter 70.95 RCW.

(18) The terms "motor vehicle," "public highway," "common carrier," "contract carrier," "private carrier," and "garbage and refuse collection companies" shall have the meaning when used herein given to them by section 2, chapter 295, Laws of 1961, and by chapter 105, Laws of 1965 ex. sess.

(19) "Tire" means a continuous solid, semipneumatic, or pneumatic rubber covering encircling the wheel of a vehicle.

(20) "Tire derived products" means any usable materials with a market value produced from the physical processing of tires.

(21) "Tire retailer" means a person in the business of selling new replacement tires.

(22) "Transportation" or "transporting" means picking up or transporting waste tires for the purpose of storage or final disposal.

(23) "Unified business identifier service locations" means:

(a) The field offices of the departments of revenue and labor and industries.

(b) The tax offices of employment security.

(c) The Olympia office of the secretary of state.

(d) The business license service office of the department of licensing.

(24) "Vehicle" means every device capable of being moved under its own power upon a public highway and in, upon, or by which any person or property is or may be transported or drawn upon a public highway, except devices moved by human or animal power or used exclusively upon stationary rails or tracks.

(25) "Waste tires" means tires that are no longer suitable for their original intended purpose because of wear, damage, or defect.

(26) "Waste tire carrier" means a person who picks up or transports waste tires for the purpose of storage or disposal. This does not include the following:

(a) Any person transporting five tires or less.

(b) Any person transporting tire-derived products.

(c) Any person transporting used tires back to a retail tire outlet for repair or exchange.

(d) Any person regulated by the utilities and transportation commission.

(e) Solid waste collectors operating under a license or franchise from any local government unit and transporting tires as part of solid waste handling activities.

(f) The United States, the state of Washington, any county, city, town, or municipality in this state, when involved in the clean up of illegal waste tire piles.

(g) Tire retailers associated with retreading facilities who use company-owned vehicles to transport waste tires for the purpose of retreading.

(27) "Waste tire storage site owner" means any person that owns a waste tire facility with a county solid waste permit.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-100, filed 1/13/89.]

WAC 173-314-200 Waste tire carrier license. (1) Applicability. All waste tire carriers are required to obtain a waste tire carrier license from the department of licensing.

(2) After April 1, 1989, all waste tire carriers must obtain a waste tire carrier license from the department of licensing. The department of licensing will process and issue licenses as quickly as possible after receiving a completed application.

(3) Application forms for a waste tire carrier license will be available at unified business identifier service locations located throughout the state.

(4) An application for a waste tire carrier license and a cab card for one vehicle shall include a two hundred fifty dollar application fee, fifty dollars of which shall be nonrefundable. Each additional vehicle cab card to be used by the licensee requires an additional fifty dollar fee. The application fee may be refunded following submittal of an application under the following conditions.

(a) Ecology determination that a license is not required.

(b) The applicant withdraws the application before ecology has approved or denied the application.

(5) The application shall include a bond in the sum of ten thousand dollars in favor of the state of Washington, or other financial assurance.

(6) A waste tire carrier license shall be valid for one year from the time of application. Licensees who want to renew their licenses will be notified forty-five days prior to their expiration date in order to maintain a current license.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-200, filed 1/13/89.]

WAC 173-314-210 Enforcement for waste tire carriers. (1) All waste tire carriers shall be subject to penalties as described in RCW 70.95.560 and 9A.20.010(2). Furthermore, any person who transports waste tires without a license is in violation of WAC 173-314-200(2) and RCW 9A.20.020(2).

(2) Any violation of the prescribed waste tire carrier license rules may result in revocation of the license under rules defined by RCW 70.95.560 and 9A.20.020(2) or any other enforcement action provided by law. Each day that a

violation occurs is a separate violation and may be the subject of separate penalties.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-210, filed 1/13/89.]

WAC 173-314-220 Storage, disposal, and utilization. After April 1, 1989, all waste tires that are being transported by a waste tire carrier must be deposited in one of the following locations:

(1) A business that is actively retreading or recycling tires and if required under conditions set forth in WAC 173-304-420 has a county tire storage permit.

(2) Any business that has an outside storage of less than the maximum number of tires allowed in accordance with WAC 173-304-420.

(3) A county permitted waste tire storage facility that has an ecology-approved waste tire storage site owner's license.

(4) A site that has been declared exempt by local health departments and ecology under WAC 173-314-310.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-220, filed 1/13/89.]

WAC 173-314-300 Waste tire storage site license. (1) Applicability. After April 1, 1989, any person in the business of storing waste tires in accordance with WAC 173-304-420 is required to have an ecology-approved waste tire storage site owner's license for that site issued by the department of licensing.

(2) All owners of county permitted waste tire storage sites shall apply to the department of licensing for a waste tire storage site owner's license. Licenses will be issued within ninety days of acceptance of a complete application following review and approval by ecology.

(3) Application forms for a waste tire storage site license will be available from unified business identifier service locations located throughout the state.

(4) Submit an application fee of two hundred fifty dollars. Fifty dollars of the application fee shall be nonrefundable. The remainder of the application fee may be refunded if either of the following conditions exists:

(a) Ecology determines that no license will be required.

(b) The applicant withdraws the application before ecology has approved or denied the application.

(5) The application shall include a performance bond in the sum of ten thousand dollars in favor of the state of Washington, or other financial assurance.

(6) A waste tire storage site license shall be valid for one year from the date of approval. The license holder shall have the option to renew annually. Licensees who want to renew their licenses will be sent a renewal notice forty-five days prior to the expiration date.

(7) In order to obtain a waste tire storage license, the site operator or owner must first satisfy the following requirements:

(a) Obtain a solid waste disposal site permit for the storage of waste tires from the jurisdictional health department of the county in which the site is located.

(b) Satisfy all of the requirements of the minimum functional standards for tire pile storage sites (WAC 173-304-420).

(c) Satisfy other requirements deemed appropriate by ecology.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-300, filed 1/13/89.]

WAC 173-314-310 Variances. (1) Any person who owns or operates a waste tire storage facility may apply to the jurisdictional health officer for a variance from WAC 173-304-420. The application shall be accompanied by such information as the jurisdictional health department may require. The jurisdictional health department may grant such variance, but only after due notice or a public hearing if requested, if it finds that:

(a) The waste tire handling practices or location do not endanger public health, safety, or the environment; and

(b) Compliance with the regulation from which variance is sought would produce hardship without equal or greater benefits to the public.

(2) No variance shall be granted pursuant to this section until the jurisdictional health department has considered the relative interests of the applicant, other owners of property likely to be affected by the handling practices and the general public.

(3) Any variance or renewal shall be granted within the requirements of subsection (1) of this section and for time periods and conditions consistent with the reasons therefore, and within the following limitations:

(a) If the variance is granted on the ground that there is no practicable means known or available for the adequate prevention, abatement, or control of pollution involved, it shall be only until the necessary means for prevention, abatement, or control become known and available and subject to the taking of any substitute or alternative measures that the jurisdictional health department may prescribe;

(b) The jurisdictional health department may grant a variance conditioned by a time table if:

(i) Compliance with the regulation will require spreading of costs over a considerable time period; and

(ii) The time table is for a period that is needed to comply with WAC 173-304-420.

(4) Any variance granted pursuant to this section may be renewed on terms and conditions and for periods which would be appropriate on initial granting of a variance. No renewal thereof shall be granted, unless following a public hearing on the complaint or due notice, the jurisdictional health department finds the renewal is justified. No renewal shall be granted except on application. Any such application shall be made at least sixty days prior to the expiration of the variance. Immediately upon receipt of an application for renewal, the jurisdictional health department shall give public notice of such application in accordance with rules and regulations of the jurisdictional health department.

(5) An application for a variance, or for the renewal thereof, submitted to the jurisdictional health department shall be approved or disapproved by the jurisdictional health department within ninety days of receipt unless the applicant and the jurisdictional health department agree to a continuance.

(6) No variance shall be granted by a jurisdictional health department except with the approval and written con-

currence of ecology prior to action on the variance by the jurisdictional health department.

(7) Variances granted by a jurisdictional health department will be accepted as variances under this section.

(8) Public notice shall be given by mailing a notice of the variance application to persons who have written to the jurisdictional health department asking to be notified of all variance requests.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-310, filed 1/13/89.]

WAC 173-314-320 Enforcement for waste tire storage sites. Failure to conduct storage of waste tires according to the conditions, limitations, or terms of a county issued permit or this chapter, or failure to obtain a waste tire storage site owner's license is a violation of this chapter and shall be subject to civil penalties as provided in chapter 70.95 RCW and RCW 9A.20.020(2) or to any other enforcement action provided by law. Each day that a violation occurs is a separate violation and may be the subject of separate penalties.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-320, filed 1/13/89.]

WAC 173-314-330 Records. Each owner of a waste tire storage site whose site accepts waste tires after April 1, 1989, shall as a condition of the license:

(1) Maintain records of numbers of waste tires received and shipped.

(2) The licensee shall issue written receipts upon receiving loads of waste tires. Quantities may be measured by aggregate loads or cubic yards, if the licensee documents the approximate number of tires included in each. These records shall be maintained for a period of three years, and shall be available for inspection by ecology after reasonable notice.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-330, filed 1/13/89.]

WAC 173-314-340 Reports. Starting on first anniversary of license issuance, and thereafter, as a requirement for license renewal, license reapplication by the owner, or license application by a new owner, the waste tire storage site owner shall submit a report through licensing for ecology review stating the following:

(1) The names and business addresses, and business licenses (if available) of all waste tire carriers that have delivered waste tires to the site, and shipped waste tires from the site, together with the quantity of waste tires shipped with those carriers.

(2) An accounting of the approximate total number of tires deposited at the site during the previous year.

(3) An accounting of the approximate total number of tires removed from the site.

(4) The number of waste tires located at the site at the time of the report.

The report form will be mailed to you by the department of licensing along with the license renewal notification forty-five days prior to the date of license renewal. The report shall be returned along with the license renewal application to the department of licensing.

[Statutory Authority: RCW 70.95.555. 89-03-047 (Order 88-33), § 173-314-340, filed 1/13/89.]

Chapter 173-321 WAC
PUBLIC PARTICIPATION GRANTS

WAC

WAC 173-321-010 Purpose and authority. (1) The department is directed by the Model Toxics Control Act to provide grants up to sixty thousand dollars to persons who may be adversely affected by a release or threatened release of a hazardous substance and to not-for-profit public interest groups. These grants shall be used to facilitate public participation in the investigation and remediation of a release or threatened release of a hazardous substance and to facilitate public participation in the implementation of the state's solid and hazardous waste management priorities.

(2) The purpose of this chapter is to set forth eligibility criteria and funding requirements for grant projects.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-010, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-010, filed 10/17/89, effective 11/17/89.]

WAC 173-321-020 Definitions. As used in this chapter:

(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) "Emergency" means an occurrence warranting public participation which occurs after the deadline for grant applications and before the opening of a new grant application period, such as:

(a) An unforeseen release of a hazardous substance at an existing site or a newly discovered site;

(b) An unanticipated decision by the department concerning remedial action at a site or publication of a remedial investigation, feasibility study or risk assessment; or

(c) Discovery of a technical assistance need which could not have been foreseen before the grant application deadline.

(4) "Emergency grant" means a public participation grant in the hazardous substance release category for an emergency as defined in this section.

(5) "Expendable personal property" means all tangible personal property other than nonexpendable personal property.

(6) "Facility" means:

(a) Any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, waste pile, pond, lagoon, impoundment, ditch, landfill, tank, storage container, motor vehicle, rolling stock, vessel, or aircraft; or

(b) Any site or area where a hazardous substance, other than a consumer product in consumer use, has been depos-

ited, stored, disposed of, or placed, or otherwise come to be located.

(7) "Grant applicant" means any person requesting a public participation grant.

(8) "Hazardous substance" means:

(a) Any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6) or any dangerous or extremely hazardous waste designated by rule pursuant to chapter 70.105 RCW;

(b) Any hazardous substance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule pursuant to chapter 70.105 RCW;

(c) Any substance that, on March 1, 1989, is a hazardous substance under 101 (14) of the Federal Cleanup Law, 42 U.S.C. Sec. 960(14);

(d) Petroleum or petroleum products; and

(e) Any substance or category of substances including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment. Except that:

The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: Crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local laws.

(9) "Hazardous waste management priorities" as defined in RCW 70.105.150 are the priorities in the management of hazardous waste which should be followed in descending order as applicable:

(a) Waste reduction;

(b) Waste recycling;

(c) Physical, chemical, and biological treatment;

(d) Incineration;

(e) Solidification/stabilization treatment;

(f) Landfill.

(10) "Nonexpendable personal property" means tangible personal property having a useful life of more than one year and an acquisition cost of three hundred dollars or more per unit.

(11) "Not-for-profit public interest organization" means any corporation, trust, association, cooperative, or other organization which:

(a) Is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest;

(b) Is not organized primarily for profit; and

(c) Uses its net proceeds to maintain, improve, and/or expand its operations.

(12) "Owner/operator" means any person defined as an owner or operator under RCW 70.105D.020(12).

(13) "Person" means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, state government agency, unit of local government, federal government agency, or Indian tribe.

(14) "Personal property" means property of any kind except real property. It may be tangible (having physical existence) or intangible (having no physical existence), such as patents, inventions, and copyrights.

(15) "Potentially liable person" means any person whom the department finds, based on credible evidence, to be liable under RCW 70.105D.040. The department shall give notice to any such person and allow an opportunity for comment before making the finding, unless an emergency requires otherwise.

(16) "Real property" means land, land improvements, structures, and appurtenances thereto, excluding moveable machinery and equipment.

(17) "Release" means any intentional or unintentional entry of any hazardous substance into the environment, including but not limited to the abandonment or disposal of containers of hazardous substances.

(18) "Remedy, remediation, or remedial action" means any action or expenditure consistent with the purposes of this chapter 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.

(19) "Solid waste management priorities" as defined in chapter 70.95 RCW are the priorities in the management of solid waste which should be followed in order of descending priority as applicable:

(a) Waste reduction;

(b) Recycling with source separation of recyclable materials as the preferred method;

(c) Energy recovery, incineration, or landfill of separated waste;

(d) Energy recovery, incineration, or landfill of mixed waste.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-020, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-020, filed 10/17/89, effective 11/17/89.]

WAC 173-321-030 Relationship to other legislation and administrative rules. (1) The organization receiving a grant shall comply fully with all applicable federal, state, and local laws, orders, regulations, and permits.

(2) Nothing in this chapter shall influence, affect, or modify existing department programs, regulations, or enforcement of applicable laws relating to solid and hazardous waste management and cleanup.

(3) All grants shall be subject to the existing, applicable accounting and auditing requirements of state laws and regulations.

(4) The department will prepare a guidance manual to facilitate compliance with these regulations.

[Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-030, filed 10/17/89, effective 11/17/89.]

WAC 173-321-040 Applicant eligibility. (1) Public participation grants may only be awarded to groups of three or more unrelated persons or to not-for-profit public interest organizations.

(2) All applicants must demonstrate their ability to appropriately administer grant funds.

(3) Applications for a hazardous substance release grant, including emergency grants, must include information on:

(a) The nature of the release or threatened release of the hazardous substance;

(b) The location of the release or threatened release of the hazardous substance;

(c) How the applicant group may be adversely affected by the release or threatened release of the hazardous substance;

(d) How the applicant group will promote public participation in the investigation or remediation of the release or threatened release of the hazardous substance;

(e) A complete project description;

(f) How the applicant group represents the environmental, health, and economic interests of individuals affected by the release or threatened release of the hazardous substance;

(g) The applicant group's history and experience, if any, in conducting activities similar to those described in the grant application;

(h) For emergency grants, a description of why an emergency exists, as defined in WAC 173-321-020(3); and

(i) Any other information specified by the department as needed to award a grant.

(4) Applications for a waste management priorities grant must include information on:

(a) How the applicant group will promote or implement the state solid or hazardous waste management priorities;

(b) How the applicant group will promote public participation in the grant project described in the application;

(c) A complete project description;

(d) The applicant group's history and experience, if any, in conducting activities similar to those described in the grant application;

(e) Any other information specified by the department as needed to award a grant.

(5) The following persons or groups of persons shall be ineligible for grant funding:

(a) Any person potentially liable, as defined under RCW 70.105D.040;

(b) Local governments including 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;

(c) Federal and state governments, or agencies thereof;

(d) Federally recognized Indian tribes, as a governing body. Individual tribe members of three or more persons are eligible to apply for a public participation grant;

(e) Organizations sustained by public funding;

(f) Public and private universities; and

(g) Any organization located outside of Washington state boundaries.

(6) Grant applications failing to qualify may be resubmitted.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-040, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-065 (Order 90-20), § 173-321-040, filed 9/4/90, effective 10/5/90. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-040, filed 10/17/89, effective 11/17/89.]

WAC 173-321-050 Application evaluation criteria. (1) Except for emergency grants which will be reviewed and evaluated by the department within twenty working days of receipt of the application, all other grant applications received will be reviewed and evaluated by the department within thirty working days after the close of the regular grant application period. Incomplete applications will not be evaluated. Applications 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. The department may fund all or portions of eligible grant applications.

(2) Priority consideration for public participation grant funding will be given to:

(a) Applicants requesting a hazardous substance release grant;

(b) New applicants; and

(c) Applicants that demonstrate the ability to provide accurate technical information on complex waste management issues.

(3) General criteria. All public participation grants will be evaluated against the following criteria:

(a) The type and extent of the applicant group's past history and experience conducting activities similar to those described in the grant application;

(b) The group's basic funding, with consideration given to groups with limited resources;

(c) The group's ability to appropriately manage grant funds;

(d) Except for emergency grants, if more than one group is interested in the same project, priority consideration will be given to groups who consolidate;

(e) Availability of funding sources for the project;

(f) Past performance under a public participation grant;

(g) The group's ability to define the environmental issue and identify what changes will occur in the problem as a result of the project; and

(h) Demonstration of the use of Bennett's hierarchy or similar methodology with a focus on outcome and clear commitment to follow through to end results.

(4) Special criteria.

(a) Hazardous substance release grants. Hazardous substance release grants, including emergency grants, will be evaluated against the following criteria:

(i) The degree to which the applicant group may be adversely or potentially adversely impacted by the release or threatened release of the hazardous substance, including but not limited to adverse or potential adverse impacts to surface and drinking waters, soils, flora or fauna, species diversity, air quality, property values, marketability of agricultural crops, and recreational areas;

(ii) The degree to which the applicant group represents the environmental, health, and economic interests of individual group members;

(iii) The degree to which the proposed project will promote public participation in the investigation or remediation of the release or threatened release of the hazardous substance.

(b) Waste management priorities grants. Waste management priorities grants will be evaluated against the following criteria:

(i) The degree to which the proposed public participation activity will promote or implement the state solid or hazardous waste management priorities;

(ii) The degree to which the proposed project will facilitate public understanding of the state solid and hazardous waste management priorities;

(iii) The degree to which the proposed public participation activities are consistent with or improve upon existing solid or hazardous waste management plans.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-050, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-065 (Order 90-20), § 173-321-050, filed 9/4/90, effective 10/5/90. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-050, filed 10/17/89, effective 11/17/89.]

WAC 173-321-060 Eligible project costs. (1) Eligible project costs for substance release grants shall include but not be limited to:

(a) Hiring technical assistants to review and interpret documents;

(b) Public involvement and public education activities;

(c) Reviewing specific plans for environmental testing and analysis, reviewing reports summarizing the results of such plans and making recommendations for modifications to such plans.

(d) Expendable personal property;

(e) Other public participation activities as determined by the department on a case-by-case basis.

(2) Eligible project costs for waste management priority grants shall include but not be limited to:

(a) Assisting in developing and implementing programs that promote or improve state or local solid or hazardous waste management plans;

(b) Assisting in developing programs or activities that promote and are consistent with the state solid or hazardous waste management priorities;

(c) Expendable personal property;

(d) Other public participation activities as determined by the department on a case-by-case basis.

(3) Ineligible projects and grant costs shall include but not be limited to:

(a) Independently collecting or analyzing samples at facility sites;

(b) Hiring attorneys for legal actions against potentially liable persons, facility owners, or the department. Applicants who receive a grant award shall notify the department if legal action is intended or taken on the subject of the grant project or application;

(c) Legislative lobbying activities;

(d) Real property;

(e) Nonexpendable personal property.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-060, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-060, filed 10/17/89, effective 11/17/89.]

WAC 173-321-070 Grant funding. (1) The department may fund up to one hundred percent of eligible project costs.

(2) The maximum grant allowance shall be sixty thousand dollars.

(3) Public participation grants may be renewed annually. A new grant application must be submitted to be evaluated and ranked for additional funding.

(4) The department reserves the right to refuse funding to any and all applications failing to meet the grant eligibility criteria and may reopen the application period for additional applications.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-070, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-070, filed 10/17/89, effective 11/17/89.]

WAC 173-321-080 Grant administration. (1) The department shall establish grant application funding cycles each year.

(2) Public notice of application funding cycles shall be published statewide.

(3) A grant application package will be sent to all persons interested in applying for public participation grants. Grant application packages will include notice of grant application deadlines, grant guidelines, and application forms.

(4) Grant applications will be evaluated by the department. To be funded, applications must include all required elements as outlined in the guidelines.

(5) The obligation of the department to make grant payments is contingent upon the availability of funds through legislative appropriation, and such other conditions not reasonably foreseeable which may preclude awarding such grants.

(6) The department, on at least a biennial basis, will determine the amount of funding available for public participation grants and establish an application and funding cycle. The minimum amount of money available for public participation grants established by the Model Toxics Control Act shall be one percent of the moneys deposited into the state and the local toxics control accounts.

(7) The department shall not be held responsible for payment of salaries, consultant fees, or other costs related to a contract of the grantee.

(8) To the extent that the Constitution and laws of the state of Washington permit, the grantee 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 grantee arising out of a grant contract.

(9) All grants under this chapter shall be consistent with "*Administrative Requirements for Ecology Grants and*" WDOE publication No. 91-18, revised October 2000.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-080, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-080, filed 10/17/89, effective 11/17/89.]

Chapter 173-322 WAC
REMEDIAL ACTION GRANTS AND LOANS

WAC

WAC 173-322-010 Purpose and authority. This chapter recognizes that the state contains hundreds of hazardous waste sites which threaten the state's water resources, including those used for public drinking water; that many of our municipal landfills are current or potential hazardous waste sites and present serious threats to human health and the environment; and that the costs of eliminating these threats in many cases are beyond the financial means of local governments and ratepayers.

This chapter establishes requirements for a program of grants to local governments for remedial action pursuant to RCW 70.105D.070 (3)(a) and (7). The department may provide grants to local governments for remedial actions including site hazard assessments, site studies and remediations, and safe drinking water actions.

[Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-010, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-010, filed 5/1/90, effective 6/1/90.]

WAC 173-322-020 Definitions. Unless otherwise defined in this chapter, words and phrases used in this chapter shall be defined according to WAC 173-340-200.

"Act" means the "Model Toxics Control Act," chapter 70.105D RCW.

"Agreed order" means an order issued under WAC 173-340-530.

"Area-wide ground water contamination" means multiple adjacent properties with different ownership affected by hazardous substances from multiple sources that have resulted in commingled plumes of contaminated ground water that are not practicable to address separately.

"Cleanup action" means any remedial action, except interim actions, taken at a site to eliminate, render less toxic, stabilize, contain, immobilize, isolate, treat, destroy, or remove a hazardous substance that complies with cleanup standards, utilizes permanent solutions to the maximum extent practicable, and includes adequate monitoring to ensure the effectiveness of the cleanup action.

"Consent order" means an order issued under chapter 90.48 or 70.105B RCW.

"Coordinated water system plan" means a plan for public water systems within a critical water supply service area which identifies the present and future water system concerns and sets forth a means for meeting those concerns in the most efficient manner possible pursuant to chapter 246-293 WAC.

"Decree" means a consent decree under WAC 173-340-520. "Consent decree" is synonymous with decree.

"Department" means the department of ecology.

"Disposal" means a remedial action which removes hazardous substances from the site and places the hazardous substances in an engineered, regulatory-complaint facility as a final destination.

"Enforcement order" means an order issued under WAC 173-340-540.

"Grant agreement" means a binding agreement between the local government and the department that authorizes the transfer of funds to the local government to reimburse it for a portion of expenditures in support of a specified scope of services.

"Hazard ranking" means the ranking for hazardous waste sites used by the department pursuant to chapter 70.105D RCW.

"Hazardous substances" means any substances as defined in WAC 173-340-200.

"Hazardous waste site" means any facility where there has been confirmation of a release or threatened release of a hazardous substance that requires remedial action.

"Independent remedial actions" means remedial actions conducted without department oversight or approval and not under an order or decree.

"Interim action" means a remedial action conducted under WAC 173-340-430 that partially addresses the cleanup of a site.

"Local government" 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.

"Minimum functional standards" means the requirements of chapters 173-304 and 173-351 WAC, the minimum functional standards for solid waste handling.

"National Priorities List (NPL)" means a list of hazardous waste sites at which the United States Environmental Protection Agency intends to proceed with enforcement or cleanup action.

"No further action (NFA) determination" means an opinion issued by the department under WAC 173-340-515 (5)(b).

"Oversight costs" are remedial action costs of the department or the United States Environmental Protection Agency reasonably attributable to the administration of an order or decree for remedial action at a hazardous waste site.

"Pilot study" means an experiment in remedial action method, with the purpose of testing the suitability of a particular cleanup technology or process for remedial action at a particular site.

"Potentially liable person (PLP)" means any person whom the department finds, based on credible evidence, to be liable under RCW 70.105D.040.

"Public water system" means any system, excluding a system serving only one single-family residence and a system with four or fewer connections all of which serve residences on the same farm, providing piped water for human consumption, including any collection, treatment, storage, or distribution facilities under control of the purveyor and used primarily in connection with the system and collection or pretreatment storage facilities not under control of the purveyor but primarily used in connection with such system.

"Purveyor" means an agency or subdivision of the state or a municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or any

other entity that owns or operates a public water system, or the authorized agent of such entities.

"Recycling" means a remedial action which permanently removes hazardous substances from the site and successfully directs the material into a new product suitable for further industrial or consumer use.

"Remedial action" means any action or expenditure 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.

"Remedial design (RD)" means an engineering study during which technical plans and specifications are developed to guide subsequent cleanup action at a hazardous waste site.

"Remedial investigation/feasibility study (RI/FS)" means a study intended to collect, develop, and evaluate sufficient information regarding a site to enable the selection of a cleanup action.

"Safe drinking water" means water meeting drinking water quality standards set by chapter 246-290 WAC.

"Safe drinking water action" means an action by a local government purveyor or other purveyor to provide safe drinking water through public water systems to areas contaminated by or threatened by contamination from hazardous waste sites.

"Site hazard assessment" means a remedial action that consists of an investigation performed under WAC 173-340-320.

"Site study and remediation" means remedial investigation, feasibility study, pilot study, remedial design, interim action or cleanup action at hazardous waste sites.

"Treatment" means a remedial action which permanently destroys, detoxifies, or recycles hazardous substances.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-020, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-020, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-020, filed 5/1/90, effective 6/1/90.]

WAC 173-322-030 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 waste investigation and cleanup.

(2) Nothing in this chapter shall modify the legal settlements and orders the department has secured with potentially liable persons for remedial action. The execution of remedies pursuant to court order or decree shall in no way be contingent upon the availability of grant funding.

(3) 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: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-030, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-030, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-030, filed 5/1/90, effective 6/1/90.]

WAC 173-322-040 Applicant eligibility. (1) All applicants must be local governments as defined in this chapter.

(2) Site study and remediation grants. Eligibility for site study and remediation grants is limited to applicants that meet the following standards:

(a) The applicant must be a local government that is a potentially liable person (PLP) at a hazardous waste site; or owns a site but is not a PLP; or applies for a remediation grant for area-wide ground water contamination. The local government may be the sole PLP, or there may be other PLPs at the site.

(b) The local government must meet one of the following standards:

(i) The department must have required the local government to perform some phase of remedial action, or have approved or reviewed a completed remedial action. That requirement, approval or review shall take one of the following forms:

(A) A consent decree under chapter 70.105D or 70.105B RCW requiring remedial action at the site; or

(B) An enforcement order or an agreed order under chapter 70.105D or 70.105B RCW prior to March 1, 1989, requiring remedial action at the site; or

(C) An enforcement order, consent order or consent decree under chapter 90.48 RCW requiring remedial action at the site or an amendment to such an order subsequent to March 1, 1989; or

(D) An underground storage tank (UST) compliance order; or

(E) A no further action (NFA) determination issued after completion of an independent remedial action.

(ii) The local government which is also a potentially responsible party under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) must have entered into a decree requiring remedial action at a hazardous waste site with the United States Environmental Protection Agency, provided that such agreement has been signed or acknowledged by the department in writing as a sufficient basis for remedial action grant funding.

(iii) The local government must have signed an agreement with the department requiring another PLP to perform remedial action at a landfill site and that agreement must take one of the forms specified in (b)(i) of this subsection. The local government must also have entered into an agreement with that PLP to reimburse the PLP for a portion of incurred remedial action costs with the sole purpose of providing relief to ratepayers and/or taxpayers from some remedial action costs.

(3) Safe drinking water action grants. Eligibility for safe drinking water action grants is limited to applicants who meet the following standards:

(a) The applicant must be a local government purveyor as defined in WAC 173-322-020 or be a local government applying on behalf of a purveyor.

(b) The subject water system must be in an area determined by the department of ecology to be a hazardous waste site or threatened by contamination from a hazardous waste site.

(c) The subject water system must exhibit levels of contamination which exceed the primary maximum contaminant levels (MCLs) set by WAC 246-290-310 or EPA standards as determined by the department of health, or exhibit levels of contamination which exceed the standards set by WAC 173-340-700 through 173-340-760 as determined by the department of ecology, or be certified by the state department of health that a contaminant threatens the safety and reliability of a public water system which cannot be remedied solely by operational solutions. Contaminants must include at least one hazardous substance. If the contaminant is a nitrate or a trihalomethane, it must be determined to have originated from a hazardous waste site.

(d) An order or decree must be issued to the identified potentially liable persons requiring that safe drinking water be provided to the contaminated area as part of a remedial action. The department may waive this requirement if it has determined that no viable potentially liable persons exist, or if public health would be threatened from unreasonable delays associated with the search for potentially liable persons, or the order or decree process.

(e) If water line extensions are included in the proposed projects, such extensions must be consistent with the coordinated water system plan and growth management plan for the geographic area containing the affected water supplies.

(f) The applicant must be in substantial compliance, as determined by the department of health, with applicable rules of the Washington state board of health or the department of health, as contained in chapter 246-290 WAC (Public water supplies), chapter 246-292 WAC (Water works operator certification), chapter 246-293 WAC (Water System Coordination Act), and chapter 246-294 WAC (Drinking water operating permits).

(4) Site hazard assessment grants. The purpose of site hazard assessment grants is to involve local health districts and departments in assessing the degree of contamination at suspected hazardous waste sites according to WAC 173-340-320. While enabling local health districts or departments to participate in the scoring and ranking process, the department retains the authority to review and verify the results of a site hazard assessment and to establish the hazard ranking of the site. Eligibility for site hazard assessment grants is limited to applications that meet the following standards:

(a) The applicant must be a local health district or department.

(b) The scope of work for a site hazard assessment must conform to WAC 173-340-320 and prescribed guidelines issued by the department.

(c) The assessment must be for sites agreed to by the department.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-040, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-040, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-040, filed 5/1/90, effective 6/1/90.]

WAC 173-322-050 Project and cost eligibility. (1) Costs for site study and remediation.

(a) Eligible costs include reasonable costs, including sales tax, incurred in performing:

(i) Remedial investigations;

(ii) Feasibility studies;

(iii) Remedial designs;

(iv) Pilot studies;

(v) Interim actions;

(vi) Landfill closures as required by chapters 173-304 and 173-351 WAC if included in the order or decree for remedial action;

(vii) Other remedial action included in the order or decree for remedial action, or included as part of the independent remedial action for which a no further action (NFA) determination is issued;

(viii) Capital costs of long-term monitoring systems; and

(ix) Operating and maintenance costs incurred during the first year of accomplishing the cleanup action after facilities and equipment have been installed or constructed.

(b) Ineligible costs:

(i) Retroactive costs except as limited by WAC 173-322-100;

(ii) Legal fees and penalties;

(iii) Oversight costs;

(iv) Operating and maintenance costs after the first year of accomplishing the remedial action;

(v) Operating and maintenance costs of long-term monitoring; and

(vi) At sites other than landfills, additional ineligible costs will include costs incurred to meet departmental requirements for source control and prevention.

(2) Costs for safe drinking water actions.

(a) Eligible costs include reasonable costs, including sales tax, incurred for:

(i) Water supply source development and replacement, including pumping and storage facilities, source meters, and reasonable appurtenances;

(ii) Transmission lines between major system components, including inter-ties with other water systems;

(iii) Treatment equipment and facilities;

(iv) Distribution lines from major system components to system customers or service connections;

(v) Fire hydrants;

(vi) Service meters;

(vii) Project inspection, engineering, and administration;

(viii) Other costs identified by the state department of health as necessary to provide a system that operates in compliance with federal and state standards, or by the coordinated water system plan as necessary to meet required standards;

(ix) Other costs identified by the department of ecology as necessary to protect a public water system from contamination from a hazardous waste site or to determine the source of such contamination;

(x) Individual service connections, including any fees and charges, provided that property owners substantially participate in financing the cost of such connections;

(xi) Drinking water well abandonment for wells identified by the department as an environmental safety or health hazard according to WAC 173-160-415; and

(xii) Interim financing where necessary as a prerequisite to local government issuance of revenue bonds.

(b) Ineligible costs include:

(i) Legal fees and penalties;

(ii) Ecology oversight costs;

(iii) Operating and maintenance costs;

(iv) Retroactive costs except as limited by WAC 173-322-100;

(v) Natural resource damage assessment; and

(vi) Costs for source control or pollution prevention activities at sites other than landfills.

(3) Costs for site hazard assessments. Eligible costs include costs for activities performed pursuant to WAC 173-340-320 and enabling local health districts or departments to participate in the department's site ranking and priority-setting process.

(4) Costs must be eligible under this section and must be approved by the department in order to be eligible for reimbursement.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-050, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-050, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-050, filed 5/1/90, effective 6/1/90.]

WAC 173-322-060 Application process. (1) Application period. The department shall determine appropriate application periods.

(2) Grant applications must:

(a) Include a commitment by the applicant for local funds to match grant funds according to the requirements of WAC 173-322-090.

(b) For site study and remediation projects include a scope of work which accomplishes the requirements of an order or decree.

(c) For safe drinking water action projects, include a scope of work necessary to provide safe drinking water to the area threatened or contaminated.

(d) For site hazard assessment projects, include a scope of work which conforms to the requirements of WAC 173-340-320(4).

(e) For independent remedial actions, include a description of the remedial action for which a no further action (NFA) determination was issued and include a copy of the NFA determination document.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-060, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-060, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-060, filed 5/1/90, effective 6/1/90.]

WAC 173-322-070 Application evaluation and prioritization. (1) When pending grant applications or anticipated demand for site study and remediation grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the following:

(a) Relative hazard ranking as determined by the department in accordance with WAC 173-340-330 or the United States Environmental Protection Agency's National Priorities List ranking. Higher ranking sites will receive a higher funding priority.

(b) Evidence that the grant will expedite cleanup.

(c) Relative readiness of the applicant to proceed promptly to accomplish the scope of work.

(2) When pending grant applications or anticipated demand for safe drinking water action grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the following:

(a) Relative risk to human health as jointly determined by the department of ecology, in accordance with WAC 173-340-330, and the department of health, in accordance with WAC 246-290-310. Sites with greater risk will receive higher funding priority.

(b) Relative readiness of the applicant to proceed promptly to accomplish the scope of work.

(c) Ownership of the water system to be extended or improved. Local government-owned systems will receive higher funding priority than other systems.

(d) Number of people served by the water system and per capita cost of remediation.

(3) When pending grant applications or anticipated demand for site hazard assessment grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the following:

(a) Potential public health or environmental threat from the sites.

(b) Ownership of the sites. Publicly-owned sites will receive priority over privately-owned sites.

(c) Relative readiness of the applicant to proceed promptly to accomplish the scope of work.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-070, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-070, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-070, filed 5/1/90, effective 6/1/90.]

WAC 173-322-080 Allocation of grant funding. In conjunction with the biennial program report and program plan required by WAC 173-340-340, the department will prepare an administrative allocation from the legislative appropriation of the local toxics control account for funding remedial action grants. Within that administrative allocation, the department will allocate subamounts for site study and remediation grants, safe drinking water action grants, and site hazard assessment grants. The allocations shall be based on estimated costs for work on eligible sites which are identified in the program plan for the biennium.

[Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-080, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-080, filed 5/1/90, effective 6/1/90.]

WAC 173-322-090 State assistance share, local cash match, economic disadvantage, and role of potentially liable persons. (1) Except as otherwise provided in this section, costs eligible for site study and remediation and safe drinking water action grants will be considered for grant funding at up to fifty percent, except in the case of site study and remediation grants with eligible costs of over two hundred thousand dollars, local governments who utilize treatment, recycling and/or disposal as part or all of the cleanup action shall be eligible to receive an additional fifteen percent. Independent remedial action grant funds are available only for projects with eligible costs of less than two hundred thousand. The

additional fifteen percent funds do not apply to independent remedial actions.

(2) Costs for site hazard assessments which are eligible under WAC 173-322-050(3) will be considered for grant funding of up to one hundred percent.

(3) Costs for area-wide ground water contamination remediation grants will be considered for grant funding of more than fifty percent. Local governments shall be required to obtain partial reimbursement from PLPs. Reasonable measures shall be taken by local governments to maximize reimbursement. The amount of grant funds and how much to pay back will be determined by the department on a case-by-case basis.

(4) Grant funding for economically disadvantaged local governments.

(a) In addition to grant funding under subsection (1) of this section, economically disadvantaged local governments may apply for up to twenty-five percent supplemental funding. This additional funding will be contingent on satisfactory demonstration of extraordinary financial need.

(b) A local government is considered economically disadvantaged if it is a county, or a local government within a county, which meets both of the following criteria:

(i) Per capita income, as measured by the latest official estimate of the Washington state office of financial management, is in the lower twenty counties in the state; and

(ii) It is economically distressed as defined by chapter 43.165 RCW.

(c) The department will include a list of counties which are economically disadvantaged as defined herein in the guidelines for remedial action grants to be published on a biennial basis.

(5) For applicants eligible for site study and remediation grants, if a decree or order requires a potentially liable person (PLP) other than a local government to conduct remedial action, the financial contribution of that PLP will be deducted from the amount eligible for grant funding to the local government.

(6) For applicants eligible for safe drinking water action grants, funding from either the local government or the PLP may be used to match remedial action grant funds.

(7) As established by the Model Toxics Control Act, chapter 70.105D RCW, and implementing regulations, the potentially liable persons bear financial responsibility for remedial action costs. The remedial action grant program may not be used to circumvent the PLP responsibility.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-090, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-090, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-090, filed 5/1/90, effective 6/1/90.]

WAC 173-322-100 Fiscal controls. (1) The department will establish reasonable costs for all grants, require applicants to manage projects in a cost effective manner, and ensure that all potentially liable persons (PLPs) assume responsibility for remedial action.

(2) The department retains the authority to issue grants which reimburse the recipient for less than the maximum percentage allowable under WAC 173-322-090.

(3) Cap on site funding. Except for independent remedial actions where a no further action (NFA) determination is issued after cleanup has been completed, after the remedial investigation and feasibility study have been completed and a final remedial action plan has been developed by an eligible applicant, the department and the applicant will establish a final cleanup budget and negotiate a grant agreement. The grant amount in this agreement will be the final department remedial action grant fund commitment for cleanup at that hazardous waste site. Grant agreements may be amended, but requests to increase the remedial action grant budget at that site will receive a lower priority than other applications.

(4) Retroactive funding. Grant funding of costs already incurred prior to the date of the grant agreement may be allowed to local governments where the order or decree with the department, if any, postdates March 1, 1989, and under one or more of the following circumstances:

(a) If the grant application period is closed when the order or decree becomes effective;

(b) If the department unreasonably delays the processing of a remedial action grant application;

(c) If there are inadequate funds in the local toxics control account to cover the entire scope of work required by decree or order; and/or

(d) If remedial actions not required by decree or order have proceeded, grants for this work may be made if the department later formally includes such work items in a decree or order, or for independent remedial actions conducted no earlier than five years before the date of application if a no further action (NFA) determination is given for that independent remedial action.

(5) Reimbursement of grant funds. If the department awards remedial action funds to a local government that successfully pursues a private right of action against a PLP who has not settled with the department or successfully pursues a claim for insurance proceeds, then the department shall be reimbursed for a proportional share of the moneys received, after the local government's legal fees in pursuing such actions have been deducted.

(6) Repayment of grant funds. Where the department provides a remediation grant for area-wide ground water contamination to a local government, the grant amount shall be partially repaid to the department where ownership of property affected by the grant is held by private parties. The terms and amount of repayment will be included in the grant agreement between the local government and the department.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-100, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-100, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-100, filed 5/1/90, effective 6/1/90.]

WAC 173-322-110 Grant administration. (1) Local governments will be periodically informed of the availability of remedial action grant funding.

(2) A grant application package will be sent to all parties expressing interest in remedial action grants and to all local governments that have been required by decree or order to perform remedial actions. Grant application packages will include grant guidelines and application forms.

(3) Application must be made within sixty days after the date that a decree or order becomes effective or for independent remedial actions, within sixty days of receipt of a no further action (NFA) determination.

(4) The department will prepare a guidance manual on a biennial basis to assist grant applicants and to facilitate compliance with this regulation.

(5) Appropriation and allocation of funds. Grants will be awarded within the limits of available 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 legislative appropriation of funds for the next biennium.

(6) Remedial action grants shall be used to supplement local government funding and funding from other sources to carry out required remedial action.

(7) The department may fund all or portions of eligible grant applications.

(8) To the extent that the Constitution and laws of the state of Washington permit, the grantee 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 grantee arising out of a grant contract.

(9) All grants under this chapter shall be consistent with *"Administrative Requirements for Ecology Grants and Loans"* WDOE publication No. 91-18, revised October 2000.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-110, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-110, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-110, filed 5/1/90, effective 6/1/90.]

WAC 173-322-120 Loans. The department may award a loan or combination loan and grant to a grant applicant. Loan terms and the repayment provisions of a loan shall be established on a case-by-case basis under an agreement between the local government and the department.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-120, filed 2/12/01, effective 3/15/01; 90-10-057 (Order 89-45), § 173-322-120, filed 5/1/90, effective 6/1/90.]

Chapter 173-325 WAC
LOW-LEVEL RADIOACTIVE WASTE DISPOSAL

WAC

WAC 173-325-010 Purpose. The purpose of this chapter is to implement section 4, chapter 2, Laws of 1986, which implements the Federal Low-Level Radioactive Waste Policy Amendments Act of 1985.

[Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-010, filed 7/7/86.]

WAC 173-325-020 Definitions. (1) "Site" means the commercial low-level radioactive waste disposal site located near Richland, Washington.

(2) "Low-level radioactive waste" means radioactive material that:

(a) Is not high-level radioactive waste, spent nuclear fuel, or byproduct material (as defined in section 11e.(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(3)(2))); and

(b) The Nuclear Regulatory Commission, consistent with existing law and in accordance with paragraph (A), classifies as low-level radioactive waste.

(3) "Northwest compact region" means the states of Washington, Oregon, Idaho, Utah, Montana, Alaska, and Hawaii.

(4) "Southeast compact region" means the states of South Carolina, North Carolina, Virginia, Tennessee, Florida, Mississippi, Alabama, and Georgia.

(5) "Rocky Mountain compact region" means the states of Nevada, Colorado, Wyoming, and New Mexico.

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

(7) "P.L. 99-240" means the Federal Low-Level Radioactive Waste Policy Amendments Act of 1985, 99 Stat. 1842.

[Statutory Authority: RCW 43.200.180 and 43.200.070. 99-22-078 (Order 99-21), § 173-325-020, filed 11/2/99, effective 12/3/99. Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-020, filed 7/7/86.]

WAC 173-325-030 Requirements for generators and brokers. (1) Any generator or broker shipping waste that originated outside the northwest compact region for disposal at the site shall pay to the state of Washington a surcharge as follows:

(a) From March 1, 1986 through December 31, 1987, $10 per cubic foot of waste.

(b) From January 1, 1988 through December 31, 1989, $20 per cubic foot of waste.

(c) From January 1, 1990, through December 31, 1992, $40 per cubic foot of waste.

(2) In addition, the department may impose penalty surcharges up to the maximum extent allowed by P.L. 99-240.

(3) Surcharge payments must be mailed or electronically transferred no later than the day the respective waste shipment leaves the state of origin. In the lower left hand corner of the check, the valid site use permit number and shipment manifest number must be recorded. For electronic transfers, the valid site use permit number, and shipment manifest number, followed by the name of the facility (limited to 35 characters) must be transmitted at the time of the transfer. A copy of the face of the check, or of the receipt for wire transfer must be attached to the shipping manifest when the shipment arrives at the disposal site.

(4) Surcharge payment may be made by a check payable to the state of Washington or by electronic transfer. Checks should be mailed to:

"LLW SURCHARGE"
Cashier
Fiscal Office
Department of Ecology
P.O. Box 5128
Olympia, WA 98509-5128

Electronic transfers should be directed to:

State Treasurer
Concentration Account
Seafirst National Bank
P.O. Box 24678
Seattle, WA 98124
Account #125000024

(5) Prenotification forms (#A-1 and #B-1) are no longer required.

(6) Brokers are required to attach to the shipping manifest a tabulated list of those generators whose waste is being shipped. The tabulated list must include the following information in the format specified:

Date of Shipment: .....

Valid Site Use Permit #	Generator	State	Compact Region	Volume	Surcharge

(7) Any generator or broker shipping waste that was originally generated in the southeast compact region for disposal at the site must attach to the shipping manifest a copy of the letter granting certification to export waste from the southeast compact region.

(8) Any generator or broker shipping waste that was originally generated in the Rocky Mountain compact region for disposal at the site must attach to the shipping manifest a copy of the letter granting approval to export waste from the Rocky Mountain compact region.

(9) Violation of any of these requirements may result in revocation of a generator's or broker's Washington State site use permit. Upon revocation of a site use permit, subsequent reissuance may be conditioned upon agreement to comply with appropriate conditions, such as a condition that surcharge payments be made by certified or cashier's check, and be received in advance, and a condition that the state of Washington be provided specific information at least three days before the shipment.

[Statutory Authority: RCW 43.200.180 and 43.200.070. 99-22-078 (Order 99-21), § 173-325-030, filed 11/2/99, effective 12/3/99. Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-030, filed 7/7/86.]

WAC 173-325-040 Requirements for site operator. (1) For each waste shipment for which a surcharge is due (as required by WAC 173-325-030 (1)-(2)), arriving at the facility, obtain a copy of the surcharge payment check or receipt of electronic wire transfer before receiving the waste shipment for disposal.

(2) For each waste shipment of a broker arriving at the facility, obtain the written information required by WAC 173-325-030(5) before receiving the waste shipment for disposal.

(3) For each waste shipment that contains waste that was originally generated in the southeast compact region arriving at the facility, obtain a copy of the letter granting certification to export waste from the southeast compact region.

(4) For each waste shipment that contains waste that was originally generated in the Rocky Mountain compact region arriving at the facility, obtain a copy of the letter granting approval to export waste from the Rocky Mountain compact region.

(5) Provide to the Washington state department of ecology information on each waste shipment received for disposal at the facility, as requested by the department.

[Statutory Authority: RCW 43.200.180 and 43.200.070. 99-22-078 (Order 99-21), § 173-325-040, filed 11/2/99, effective 12/3/99. Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-040, filed 7/7/86.]

WAC 173-325-050 Effective dates. This chapter shall take effect April 21, 1986, (1) except the requirements in WAC 173-325-030 (1)-(2), which took effect March 1, 1986, and (2) WAC 173-325-040(3), which takes effect immediately.

[Statutory Authority: RCW 43.200.180 and 43.200.070. 99-22-078 (Order 99-21), § 173-325-050, filed 11/2/99, effective 12/3/99. Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-050, filed 7/7/86.]

Chapter 173-326 WAC

COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL—SITE USE PERMITS

WAC

WAC 173-326-010 Purpose. The purpose of this chapter is to institute a user permit system and issue site use permits, consistent with regulatory practices, for generators, packagers, or brokers using the Hanford low-level radioactive waste disposal facility (RCW 43.200.080(4)). These rules are in addition to applicable requirements of the United States Nuclear Regulatory Commission (NRC), the United States Department of Transportation (DOT), the requirements of the department of health, Title 246 WAC, other requirements of Title 173 WAC, and conditions of the license issued to the disposal site operator(s).

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-010, filed 12/2/92, effective 3/1/93. 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) For the purposes of chapter 173-326 WAC, "low-level radioactive waste" means any radioactive waste which is acceptable for disposal at the Hanford commercial radioactive waste disposal facility.

(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 radioactive 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, and who then declares it to be no longer of use or value.

(5) "Shipment" means the total low-level radioactive waste material transported in one vehicle.

(6) "Packager" means broker for the purposes of chapter 173-326 WAC.

(7) "Nuclear utility" means any operating or inactive nuclear utility.

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-020, filed 12/2/92, effective 3/1/93. 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 generators and brokers using the Hanford low-level radioactive waste disposal facility. (1) Each generator and broker of low-level radioactive waste shall obtain a new site use permit for disposal of waste at the Hanford commercial radioactive waste disposal facility by March 1, 1993. Permits shall be renewed annually to maintain the permit in active status. Failure to obtain a new permit by March 1, 1993, or to renew a permit in subsequent years, will result in the generator or broker being placed in inactive status. Reinstatement to active status will require the generator or broker to submit additional payment as specified in WAC 173-326-050 (1)(e).

(2) Generator and broker permit application requirements.

(a) Each generator and broker shall pay the site use permit fees as required in chapter 173-326 WAC.

(b) An application for a site use permit shall be filed on the department form provided.

(c) Each application must be signed by an individual authorized to sign on behalf of the organization.

(d) To ensure timely renewal, generators and brokers need to submit their applications for site use permit renewal a minimum of four weeks prior to the expiration date of their permit. Renewal notices will be sent to generators approximately three months prior to the permit expiration date.

(3) Number of permits required by each generator.

(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 responding to the department of ecology for matters pertaining to 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.

(c) Facilities who both generate and broker wastes must obtain separate generator and broker permits.

(4) Additional generator and broker requirements.

(a) Permittees must provide additional information as requested by the department of ecology for the safe management of low-level radioactive waste in the state of Washington.

(b) A broker must ensure that a generator has a current, unencumbered site use permit prior to shipment of that generator's waste to the Hanford commercial radioactive waste disposal facility located in the state of Washington, and that the waste will arrive at the disposal facility prior to the expiration date of the generator's permit.

(c) A broker shall ensure all low-level radioactive waste contained within a shipment accepted for disposal at the Hanford commercial radioactive waste disposal facility in the state of Washington is 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: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-030, filed 12/2/92, effective 3/1/93. 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 Payment procedures. (1) Generator payment procedures.

Each application shall be accompanied by full payment of the generator fee as required in WAC 173-326-050 (1)(c). Generators who fail to apply for a permit by March 1, 1993, or fail to maintain a permit in active status, must also include payment of the reinstatement fee as required in WAC 173-326-050 (1)(e).

(2) Broker fee payment procedures.

Each application shall be accompanied by full payment of the broker fee as required in WAC 173-326-050(2). Brokers who fail to apply for a permit by March 1, 1993, or fail to maintain a permit in active status, must also include payment of the reinstatement fee as required in WAC 173-326-050 (1)(e).

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-040, filed 12/2/92, effective 3/1/93. 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.]

WAC 173-326-050 Permit fees. (1) Generator site use permit fee.

(a) For the purpose of assessing generators permit fees (other than nuclear utilities, new generators, and applicants requiring reinstatement), the total annual volume (cubic feet) deposited by each generator during the previous calendar year will be used. Nuclear utilities fees will be based on the ratio found in (b) of this subsection.

(b) The annual site use permit fee for generators shall be determined by the following ratio:

Classification	Ratio
< 50 cubic feet	1x
≥ 50 < 500 cubic feet	2x
≥ 500 < 1000 cubic feet	5x
≥ 1000 < 2500 cubic feet	10x
≥ 2500 cubic feet	35x
Nuclear Utilities	100x

The value of x, which represents the annual base fee, will be published in the *Washington State Register* pursuant to (c) of this subsection.

(c) Fees will be adjusted annually, as required, utilizing the 1x:2x:5x:10x:35x:100x ratio. Fee rates will be published in the *Washington State Register* and distributed to generators by the first day of each calendar year.

(d) A new generator's permit fees will be based on the generator's estimate of the volume (cubic feet) of waste requiring disposal during the first year. If a generator's waste deposits exceed the generator's volume projection, the permit will be suspended until additional fees are paid. Overpayment will be credited toward the site use permit fee for the subsequent year.

(e) A generator or broker who has not obtained a new permit by March 1, 1993, or fails to maintain annual renewal of the permit shall include an additional payment of one thousand dollars. The permit fee for these generators will be based on the volume of waste disposed during the most recent calendar year in which waste was disposed.

(2) Broker site use permit fee. The annual cost of a permit for a broker shall be one thousand dollars.

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-050, filed 12/2/92, effective 3/1/93.]

WAC 173-326-060 Requirements for site operator. The site operator shall provide the department of ecology with information on each waste shipment accepted for disposal at the site as requested by the department.

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-060, filed 12/2/92, effective 3/1/93.]

Chapter 173-328 WAC
MIXED WASTE MANAGEMENT FEES

WAC

WAC 173-328-010 Purpose and authority. (1) The purpose of this chapter is to implement the provisions of RCW 70.105.280, by establishing a means for the department of ecology to assess reasonable mixed waste management fees against facilities that treat, store, or dispose of mixed waste and against mixed waste facilities undergoing closure under chapter 70.105 RCW. The fee collected shall be sufficient to fund all costs of carrying out the department's duties under chapter 70.105 RCW at mixed waste facilities.

(2) This chapter establishes the method by which the department shall assess fees, describes entities subject to such fees, establishes provisions for appealing and enforcing fee assessments, and delineates associated responsibilities of the department and facility owners and operators.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-010, filed 4/20/93, effective 5/21/93.]

WAC 173-328-020 Applicability. This chapter applies to any person who owns or operates a facility that treats, stores, or disposes of mixed waste. This also applies to mixed waste facilities undergoing closure under chapter 70.105 RCW. This chapter does not apply to facilities managing only low-level radioactive waste.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-020, filed 4/20/93, effective 5/21/93.]

WAC 173-328-030 Definitions. (1) The following terms are used and shall have meanings as defined in chapter 70.105 RCW or WAC 173-303-040 as amended:

(a) Closure;

(b) Dangerous waste;

(c) Department;

(d) Disposal;

(e) Facility;

(f) Operator;

(g) Permit;

(h) Storage; and

(i) Treatment.

(2) When used in this chapter, the following terms have the meanings given below.

(a) "Manage" or "management" means to treat, store, or dispose of mixed waste, or close a mixed waste facility, or perform other activities required under chapter 70.105 RCW.

(b) "Mixed waste" means a dangerous waste that contains both a nonradioactive hazardous component and source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954.

(c) "Mixed waste management fee" or "fee" means an assessment imposed under RCW 70.105.280 against those facilities that store, treat, or dispose of mixed waste. The fee shall also apply to facilities undergoing closure under chapter 70.105 RCW.

(d) For facilities sited by the energy facility site evaluation council under chapter 80.50 RCW, the terms "owner" and "operator" in WAC 173-328-060 and 173-328-070 mean the energy facility site evaluation council.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-030, filed 4/20/93, effective 5/21/93.]

WAC 173-328-040 Fee establishment. The department shall, on a biennial basis, determine all reasonable program costs necessary to carry out the department's duties under chapter 173-303 WAC for each mixed waste facility. The fee may be assessed at a mixed waste facility for the department's regulation of both mixed waste and nonradioactive dangerous waste. The department shall include, but not be limited to, the following items to determine fee amounts:

(1) Direct and indirect cost of:

(a) Office space and supplies, administrative staff, support staff, and staff training;

(b) The development of associated regulations and guidelines;

(c) Determination, assessment, and collection of fees;

(d) Tracking and accounting services;

(e) Public involvement, education, and outreach; and

(f) Data management.

(2) Direct and indirect permitting costs of:

(a) Staff, staff support, and staff training for reviewing, approving, and issuing dangerous waste permits and closure plans;

(b) Reviewing and issuing permit modifications and renewals;

(c) Travel; and

(d) Contract services.

(3) Direct and indirect compliance activity cost of:

(a) Staff, staff support, and staff training to prepare and conduct compliance inspections;

(b) Sampling and lab analysis;

(c) Contract services;

(d) Travel; and

(e) Preparation of compliance report(s).

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-040, filed 4/20/93, effective 5/21/93.]

WAC 173-328-050 Fee review and comment. Fee review process.

(1) On or before July 1st of even-numbered calendar years, the department shall notify, by registered mail, each facility owner/operator of its biennial estimated fee assessment and provide the opportunity to review and comment prior to submittal of the department's budget to the legislature.

(2) The facility owner/operator shall have forty-five days to submit written comments to the department for consideration in the fee assessment.

(3) Prior to submittal of the department's budget to the legislature, the department shall notify the facility owner/operator of any changes to their estimated fee assessment.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-050, filed 4/20/93, effective 5/21/93.]

WAC 173-328-060 Fee assessment. (1) After legislative approval of a budget for the department, the department may bill the facility owner/operator the required fees necessary to fund all mixed waste management costs.

(2) Anticipated fees. Anticipated fees include, but are not limited to, costs for permit issuance, permit maintenance, closure plan approval, and compliance audits.

(a) The department shall annually bill the owners/operators of all mixed waste facilities on or before October 1st for anticipated department activities to be performed that fiscal year.

(b) The department shall notify a facility owner/operator of any changes to the biennial estimate prior to sending each annual bill.

(c) The fee shall be submitted by the facility owner/operator to the department within thirty days after receipt of the bill.

(d) Any fees collected in excess of the department's actual costs will be adjusted in the subsequent billing to reflect the department's actual activities.

(3) Unanticipated fees. Unanticipated fees include, but are not limited to, the direct and indirect costs, as outlined in WAC 173-328-040, for unplanned enforcement activities, compliance activities, and facility modifications.

(a) The department may bill the owner/operator of a mixed waste facility upon completion of the unanticipated activity.

(b) The facility owner/operator shall be billed the amount of all direct and indirect costs incurred by the department to complete the unplanned regulatory activity.

(c) The unanticipated fee shall be submitted by the facility owner/operator to the department within thirty days after the receipt of the bill.

(4) Fees collected by the department shall be deposited into the state toxics control account.

(5) The fee shall not exceed the amount necessary for the department to carry out its duties under chapter 173-303 WAC.

(6) The department shall maintain a system of accountability to track annual costs incurred by the department.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-060, filed 4/20/93, effective 5/21/93.]

WAC 173-328-070 Appeals and enforcement. (1) The owner/operator of a facility who is assessed a fee under this chapter may appeal the fee to the department. The appeal must be received by the department within thirty days after the facility owner/operator's receipt of the bill. Any appeal shall state the name and address of the facility to which the fee was assessed, and shall state reasons for challenging the fee.

(2) After receipt of an appeal, the department shall consider the reasons stated in the appeal and either issue a revised bill or a statement upholding the original bill. The issuance of either document shall constitute the final decision of the department.

(3) The department shall not take any enforcement action for failure to pay the assessed fee until resolution of the appeal.

(4) The fee stated in the department's final decision shall be submitted by the facility owner/operator to the department within thirty days after receipt of the final decision.

(5) Any person who fails to pay fees as required by this chapter shall be subject to enforcement actions consistent with chapter 70.105 RCW. Such enforcement may include penalties in accordance with RCW 70.105.080, 70.105.090, and 70.105.095.

(6) Payment of enforcement penalties shall not be deemed as payment of fees. Payment of fees after the assessment of an enforcement penalty shall not be deemed as a cause for reducing or eliminating the penalty.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-070, filed 4/20/93, effective 5/21/93.]

Chapter 173-330 WAC

USED AUTOMOTIVE OIL RECYCLING SIGN REQUIREMENTS FOR AUTOMOTIVE OIL SELLERS

WAC

WAC 173-330-010 Purpose. Pursuant to chapter 19.114 RCW it is recognized by the legislature that used automotive oil is a limited resource that can be collected and

recycled. Further, improper disposal results in undesirable effects upon the economy and the environment.

These rules provide minimum requirements for the posting and maintaining of durable and legible signs informing the public of proper collection and disposal of used oil.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-010, filed 7/19/84.]

WAC 173-330-020 Applicability. All sellers as defined in WAC 173-330-030 shall conform to the provisions of this chapter.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-020, filed 7/19/84.]

WAC 173-330-030 Definitions. Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

(1) "Used oil" means automotive oil which through use, storage, or handling has become unsuitable for its original purpose due to the presence of impurities or the loss of original properties.

(2) "Recycle" means to prepare used oil for reuse as a petroleum product by refining, rerefining, reclaiming, reprocessing, or other means or to use used oil as a substitute for a petroleum product made from new oil, provided that the preparation or use is operationally safe, environmentally sound, and complies with all laws and rules.

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

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

(5) "Person" means an individual, private or public corporation, partnership, cooperative, association, estate, municipality, political subdivision or governmental agency or instrumentality.

(6) "Seller" means any person selling oil within the state of Washington who sells 100 gallons or more of automotive oil per year for use off their premises.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-030, filed 7/19/84.]

WAC 173-330-040 Responsibility to procure and post sign. It shall be the responsibility of all sellers to procure, post and maintain a sign in accordance with the provisions within this chapter. Signs will be provided by the department.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-040, filed 7/19/84.]

WAC 173-330-050 Sign criteria. (1) A sign shall be constructed of white card stock - 80# or of equal or better weight and quality material and:

a. Be commercially printed;
b. Be size 11" x 14" or 3" x 5" shelf hangers;
c. Have type style - Helvetica;
d. Have type color - Green #345; and
e. Carry the recycling logo.

(2) ALL SIGNS WILL CARRY THIS MESSAGE:

RECYCLE USED OIL

* Prevent water pollution
* Protect public health
* Reuse limited resources

FOR MORE INFORMATION CALL 1-800-RECYCLE

(3) The sign shall indicate how and where used oil may be properly disposed of including the location and hours of operation of conveniently located used oil collection facilities. This information may be clearly handwritten in an information block on the sign.

(4) The sign shall be substantially in the form shown in WAC 173-330-900 contained herein.

(5) Oil sellers may provide their own signs. Limited variances from the sign criteria will be allowed, subject to the department's approval. Proofs of the seller-provided signs must be submitted to the department for written approval prior to posting.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-050, filed 7/19/84.]

WAC 173-330-060 Posting and maintenance of signs. (1) Signs shall be posted in a location visible to the public at or near the point of sale. This location shall either be at the automotive oil display location within the store, at the cash register or on the exterior window facing.

(2) Signs shall be maintained at the required location and shall remain fully visible and legible at all times.

(3) Requests for replacement of damaged, lost or misplaced signs will be made in a timely manner not to exceed two business days. Seller-provided signs should be replaced as soon as practical but not to exceed 14 days.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-060, filed 7/19/84.]

WAC 173-330-070 Effective date and compliance. (1) This chapter shall become effective October 1, 1984. Sellers shall post signs in accordance with the provisions of this chapter as of that date.

(2) Sellers shall notify the department in writing by January 1, 1985 of compliance.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-070, filed 7/19/84.]

WAC 173-330-900 Logo and sign.

"IMPROPER DISPOSAL OF USED OIL IS A SIGNIFICANT SOURCE OF WATER POLLUTION, CONTRIBUTES TO THE OVERALL SHORTAGE OF ENERGY RESOURCES AND HAS A DETRIMENTAL IMPACT ON GENERAL PUBLIC HEALTH"
-CHAPTER 173-330 WAC

RECYCLE USED OIL AT:
LOCATION _____
TIMES _____

FOR MORE INFORMATION CALL
THE WASHINGTON STATE DEPT. OF ECOLOGY
LITTER CONTROL AND RECYCLING PROGRAM
1-800-RECYCLE

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-900, filed 7/19/84.]

Chapter 173-331 WAC
VEHICLE BATTERY RECYCLING

WAC

WAC 173-331-010 Authority and purpose. The department of ecology has been authorized under RCW 70.95.670 to implement and enforce a vehicle battery recycling program. The purpose of this chapter is to establish procedures for implementation and enforcement of RCW 70.95.610 through 70.95.660, which is designed to accomplish the recycling of used vehicle batteries through a system of exchanging batteries at the point of sale.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-010, filed 2/11/91, effective 3/14/91.]

WAC 173-331-100 Definitions. The following words, terms, and phrases shall, for the purposes of this chapter, have the meanings given below:

(1) The terms wholesale and retail shall have the same meanings provided in Title 82 RCW, Excise taxes. For example, wholesale refers to the sale of vehicle batteries to retail establishments, and retail refers to sale of vehicle batteries that require payment of the retail sales tax.

(2) Authorization means the license issued by the department of licensing and approved by the department of ecology as authorized by RCW 70.95.610.

(3) Business location means the premises where business is conducted.

(4) Core charge means an added charge applied during a retail sale to be refunded to the purchaser when a used battery of equivalent size is offered in exchange.

(5) Department means the department of ecology.

(6) Disposal means to deposit, dump, abandon, or spill any vehicle battery into or on any land, water, solid waste landfill, or solid waste incinerator.

(7) Equivalent size means weighing fifty to one hundred fifty percent of the vehicle battery purchased.

(8) New vehicle battery means any vehicle battery intended for use as an electrical energy storage device.

(9) Original battery installation means any new vehicle or device that requires a vehicle battery to be connected or installed before use is possible.

(10) Replacement vehicle battery means any vehicle battery sold at retail (a) that is not sale of an original battery installation, or (b) without verifiable proof that the buyer needs the battery for an original battery installation.

(11) Secondary lead smelter means any facility licensed by a state or federal government to reclaim lead from vehicle batteries.

(12) Unified business identifier service location means:

(a) The field offices of the departments of revenue and labor and industries.

(b) The tax offices of employment security.

(c) The Olympia office of the secretary of state.

(d) The business license service office of the department of licensing.

(13) Used vehicle battery means any vehicle battery intended for reclamation, separate from a vehicle or other installation.

(14) Vehicle battery means any battery used or capable of use, without modification, in any vehicle, truck, mobile home, recreational vehicle, boat, airplane, or utility vehicle, having a core of elemental lead, with the capability to produce six or more volts. For purposes of application of the core

charge only, a vehicle battery shall be a replacement battery and the core charge shall not apply to original battery installations.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-100, filed 2/11/91, effective 3/14/91.]

WAC 173-331-200 Posting of retail notices. (1) This section refers to the notices required by RCW 70.95.630(2).

(2) All required notices must be posted in the main vehicle battery display area or other area clearly visible to battery purchasers. Notices must be posted no lower than four feet and no higher than seven feet, level to the floor. Notices must be maintained free of any viewing obstructions.

Note: Notices are available by calling 1-800-RECYCLE.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-200, filed 2/11/91, effective 3/14/91.]

WAC 173-331-210 Optional exemption to the core charge. A retailer is not required to apply a core charge to a battery sale when the buyer submits verifiable proof that the battery is needed for an original battery installation. Verifiable proof shall consist of a voucher issued by the seller of the vehicle or device containing the following:

(1) Title, address, and phone of the retail establishment;

(2) Brief description of the vehicle or device sold with indication that a battery(s) was not included;

(3) Date of issuance;

(4) Name of the purchaser; and

(5) Signature of the sales agent.

Vouchers shall be valid for ninety days following the date of issuance and must be surrendered to the retailer during the battery sale.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-210, filed 2/11/91, effective 3/14/91.]

WAC 173-331-220 Condition of used batteries. (1) A purchaser must provide a used battery in a fully-capped, unbroken condition to qualify for waiver of the core charge. A retailer may refuse to accept a broken or uncapped battery, or may condition acceptance upon provision of a leak proof, acid resistant container, such as a plastic pail, holding the broken or uncapped battery.

(2) The department shall provide on its 1-800-RECYCLE Hotline a list of recycling outlets available for broken and uncapped batteries.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-220, filed 2/11/91, effective 3/14/91.]

WAC 173-331-300 Conditions for suspending the acceptance requirements. (1) This section refers to the suspension order required by RCW 70.95.650(3).

(2) When the department deems it necessary, the department shall determine the market price paid for used lead batteries by contacting agents of the secondary smelters historically used to process used vehicle batteries originating in Washington. The department shall determine transportation costs by contacting at least three trucking firms and at least three shipping firms for estimated unit costs to transport batteries to each secondary smelter. If the lowest estimated transportation costs are higher than market price paid for all of the secondary smelters, the department will order a suspension.

(3) The department will notify retailers of any suspension by sending notice to trade organization representatives and other businesses on our vehicle battery program mailing list. (To get on the vehicle battery mailing list call (360) 438-7541.)

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-300, filed 2/11/91, effective 3/14/91.]

WAC 173-331-400 Authorization of used battery collectors. (1) This section refers to RCW 70.95.610(1).

(2) Beginning May 1, 1991, any person who collects used vehicle batteries nonincidental to accepting exchanges during sale of new batteries, excluding local governments with approved local hazardous waste plans pursuant to RCW 70.105.220, must have a department approved authorization issued by the department of licensing.

(3) License fees for each business location shall be fifteen dollars annually.

(4) Application forms for a used vehicle battery collector authorization will be available at unified business identifier service locations located throughout the state.

Note: Assistance finding the nearest unified business identifier service is available by calling 1-800-562-8203.

(5) Ecology review of application for authorization as a used vehicle battery collector:

(a) Any application for authorization or reauthorization as a used vehicle battery collector is subject to review and final approval or disapproval by the department of ecology.

(b) The applicant will be notified if the department has evidence that the applicant has failed to comply with environmental regulations affecting the handling, storage, transport, reclamation, or disposal of vehicle batteries. Such failure is sufficient reason for the department to disapprove or rescind authorization as a vehicle battery collector.

(c) Notification shall be in writing and shall include a statement of the basis for the department's belief that failure to comply has occurred and an indication of the department's intentions regarding authorization.

(d) The applicant may submit to the department comments on the department's intended action and basis for that action. Any comments shall be submitted in writing to the department within fifteen days from date of receipt of the department's notice letter unless the department provides an extension.

(e) After reviewing any comments, the department shall issue a letter notifying the applicant of its decision whether to authorize the applicant as a vehicle battery collector. Such decision may be appealed to the department by written application for review within fifteen days of receipt by the applicant of the department's decision. The department shall issue a notice of its decision on the application for review within fifteen days of the receipt of such application. This notice shall be the department's final decision.

(f) Pursuant to RCW 43.21B.110 (1)(c), the department's final decision is appealable to the pollution control hearings board.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-400, filed 2/11/91, effective 3/14/91.]

WAC 173-331-410 Reporting requirements. (1) Consistent with RCW 70.95.280, persons who collect used vehicle batteries in Washington state and recondition them, reclaim them, or arrange transport of the used batteries to out-of-state locations shall report annually to the department quantities of batteries collected and their destination(s).

Note: Reporting instructions and forms are available by calling 1-800-RECYCLE.

(2) Requests for confidentiality will be honored if the reporting business shows that publication of the information may affect adversely its competitive position and if the department determines that confidentiality is not detrimental to public interest.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-410, filed 2/11/91, effective 3/14/91.]

WAC 173-331-500 Handling of used vehicle batteries. Nothing in this chapter shall exempt wholesalers, retailers, or used battery collectors from the sections pertaining to lead-acid battery handling in the state's dangerous waste regulations, chapter 173-303 WAC, including WAC 173-303-050 (Department of ecology cleanup authority), WAC 173-303-145 (Spills and discharges into the environment), and WAC 173-303-960 (Special powers and authorities of the department). All shall use prudent procedures of handling and storing used vehicle batteries.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-500, filed 2/11/91, effective 3/14/91.]

WAC 173-331-600 Severability. If any provision of this chapter or its application to any person is held invalid, the remainder of the chapter or the application of the provision to other persons or circumstances is not affected.

Note: Copies of RCW 70.95.280 and 70.95.610 through 70.95.670, WAC 173-303-050, 173-303-145 and 173-303-960, and additional copies of this chapter, chapter 173-331 WAC, are available from the Department of Ecology, Office of Waste Reduction, Recycling, and Litter Control, Mailstop PV-11, Olympia, WA 98504-8711, (360) 438-7541, 1-800-RECYCLE, 1-800-732-9253.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-600, filed 2/11/91, effective 3/14/91.]

Chapter 173-340 WAC
MODEL TOXICS CONTROL ACT—CLEANUP

WAC

PART I—OVERALL CLEANUP PROCESS

PART II—DEFINITIONS AND USAGE

PART III—SITE REPORTS AND CLEANUP DECISIONS

PART IV—SITE CLEANUP AND MONITORING

PART V—ADMINISTRATIVE PROCEDURES FOR REMEDIAL ACTIONS

PART VI—PUBLIC PARTICIPATION

PART VII—CLEANUP STANDARDS

PART VIII—GENERAL PROVISIONS

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-340-010 Purpose. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-010, filed 6/8/88.]

Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

173-340-020 Definitions. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-020, filed 6/8/88.] Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

173-340-030 Emergency actions. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-030, filed 6/8/88.] Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

173-340-040 Settlement procedures. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-040, filed 6/8/88.] Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

173-340-050 State conducted remedial action—Notice. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-050, filed 6/8/88.] Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

PART I—OVERALL CLEANUP PROCESS

WAC 173-340-100 Purpose. This chapter is promulgated under the Model Toxics Control Act. It establishes administrative processes and standards to identify, investigate, and clean up facilities where hazardous substances have come to be located. It defines the role of the department and encourages public involvement in decision making at these facilities.

The goal of this chapter is to implement chapter 70.105D RCW. This chapter provides a workable process to accomplish effective and expeditious cleanups in a manner that protects human health and the environment. This chapter is primarily intended to address releases of hazardous substances caused by past activities although its provisions may be applied to potential and ongoing releases of hazardous substances from current activities.

Note: All materials incorporated by reference in this chapter are available for inspection at the Department of Ecology's Toxics Cleanup Program, 300 Desmond Drive, Lacey, Washington, 98503.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-100, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-100, filed 4/3/90, effective 5/4/90.]

WAC 173-340-110 Applicability. (1) This chapter shall apply to all facilities where there has been a release or threatened release of a hazardous substance that may pose a threat to human health or the environment. Under this chapter, the department may require or take those actions necessary to investigate and remedy these releases.

(2) Nothing herein shall be construed to diminish the department's authority to address a release or threatened release under other applicable laws or regulations. The cleanup process and procedures under this chapter and under other laws may be combined. The department may initiate a remedial action under this chapter and may upon further analysis determine that another law is more appropriate, or vice versa.

(3) If a hazardous substance remains at a facility after actions have been completed under other applicable laws or regulations, the department may apply this chapter to protect human health or the environment.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-110, filed 4/3/90, effective 5/4/90.]

WAC 173-340-120 Overview. (1) Purpose. This section provides an overview of the cleanup process that typically will occur at a site where a release of a hazardous substance has been discovered with an emphasis on sites being cleaned up under order or consent decree. If there are any inconsistencies between this section and any specifically referenced sections, the referenced section shall govern.

(2) Site discovery. Site discovery includes:

(a) Release reporting. An owner or operator who knows of or discovers a release of a hazardous substance due to past activities must report the release to the department as described in WAC 173-340-300. Most current releases of hazardous substances must be reported to the department under the state's hazardous waste, underground storage tank, or water quality laws. The term "hazardous substance" includes a broad range of substances as defined by chapter 70.105D RCW.

(b) Initial investigation. Within ninety days of learning of a hazardous substance release, the department will conduct an initial investigation of the site under WAC 173-340-310. For sites that may need further remedial action, the department will send an early notice letter to the owner, operator, and other potentially liable persons known to the department, informing them of the department's decision.

(3) Site priorities. Sites are prioritized for further remedial action by the following process:

(a) Site hazard assessment. Based on the results of the initial investigation, a site hazard assessment will be performed if necessary, as described in WAC 173-340-320. The purpose of the site hazard assessment is to gather information to confirm whether a release has occurred and to enable the department to evaluate the relative potential hazard posed by the release. If the department decides that no further action is required, it will notify the public of that decision through the *Site Register*.

(b) Hazardous sites list. The department will maintain a list of sites known as the "hazardous sites list" where further remedial action is required. The department will add sites to this list after the completion of a site hazard assessment. Sites placed on the list will be ranked using the department's hazard ranking method. The department will remove a site from the hazardous sites list if the site meets the requirements for removal described in WAC 173-340-330.

(c) Biennial program report. Every even-numbered year, the department will prepare a biennial program report for the legislature. The hazard ranking, along with other factors, will be used in this report to identify the projects and expenditures recommended for appropriation. See WAC 173-340-340.

(4) Detailed site investigations and cleanup decisions. The following steps will be taken to ensure that the proper method of cleanup is chosen for the site.

(a) Remedial investigation. A remedial investigation will be performed at ranked sites under WAC 173-340-350. The purpose of the remedial investigation is to collect data and information necessary to define the extent of contamination and to characterize the site.

(b) Feasibility study. A feasibility study will be conducted at ranked sites under WAC 173-340-350. The purpose of the feasibility study is to develop and evaluate alternative cleanup actions. The department will evaluate the remedial

investigation/feasibility study, establish cleanup levels and the point or points at which they must be complied with in accordance with the procedures provided for in WAC 173-340-700 through 173-340-760 and select a cleanup action that protects human health and the environment and is based on the remedy selection criteria and requirements in WAC 173-340-350 through 173-340-390. WAC 173-340-440 sets forth the circumstances in which institutional controls will be required to ensure continued protection of human health and the environment.

(c) Cleanup action plan. The cleanup action will be set forth in a draft cleanup action plan that addresses cleanup requirements for hazardous substances at the site. After public comment on the draft plan, a final cleanup action plan will be issued by the department.

(5) Site cleanup. Once the appropriate cleanup action has been selected for the site, the actual cleanup will be performed.

(a) Cleanup actions. WAC 173-340-400 describes the design and construction requirements for implementing the cleanup action plan.

(b) Compliance monitoring and review. The cleanup action must include compliance monitoring under WAC 173-340-410 and in some cases periodic review under WAC 173-340-420 to ensure the long-term effectiveness of the cleanup action.

(6) Interim actions. Under certain conditions it may be appropriate to take early actions at a site before completing the process described in subsections (2) through (5) of this section. WAC 173-340-430 describes when it is appropriate to take these early or interim actions and the requirements for such actions.

(7) Leaking underground storage tanks. Underground storage tank (UST) owners and underground storage tank operators regulated under chapter 90.76 RCW are required to perform specific actions in addition to what other site owners and operators would do under this chapter. WAC 173-340-450 describes the requirements for leaking underground storage tanks.

(8) Procedures for conducting remedial actions.

(a) Remedial action agreements. The department has authority to take remedial actions or to order persons to conduct remedial actions under WAC 173-340-510 and 173-340-540. However, the department encourages agreements for investigations and cleanups in appropriate cases. These agreements can be agreed orders or consent decrees reached under the procedures of WAC 173-340-520 and 173-340-530.

(b) Independent remedial actions. Persons may conduct investigations and cleanups without department approval under this chapter. The department will use the appropriate requirements in this chapter when evaluating the adequacy of any independent remedial action. Except as limited by WAC 173-340-515(2), nothing in this chapter prohibits persons from conducting such actions before the department is ready to act at the site; however, all interim and cleanup actions must be reported to the department under WAC 173-340-515. Furthermore, independent remedial actions are conducted at the potentially liable person's own risk and the department may take or require additional remedial actions at these sites at any time. (See WAC 173-340-515 and 173-340-545.)

(9) Public participation. At sites where the department is conducting the cleanup or overseeing the cleanup under an order or decree, the public will receive notice and an opportunity to comment on most of the steps in the cleanup process. At many sites, a public participation plan will be prepared to provide opportunities for more extensive public involvement in the cleanup process.

These and other requirements are described in WAC 173-340-600.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-120, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-120, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-120, filed 4/3/90, effective 5/4/90.]

WAC 173-340-130 Administrative principles. (1) Introduction. The department shall conduct or require remedial actions consistent with the provisions of this section.

(2) Information sharing. It is the policy of the department to make information about releases or threatened releases available to owners, operators or other persons with potential liability for a site in order to encourage them to conduct prompt remedial action. It is also the policy of the department to make the same information available to interested members of the general public so they can follow the progress of site cleanup in the state.

(3) Information exchange.

All persons are encouraged to contact the department and seek assistance on the general administrative and technical requirements of this chapter. Through its technical consultation program described in WAC 173-340-515, the department may also provide informal advice and assistance to persons conducting or proposing remedial actions at a specific site at any time. Unless the department is providing formal guidance for the implementation of an order or decree, any comments by the department or its agents are advisory and not commitments or approvals binding on the department. A person may not represent this advice as an approval of a remedial action. If the person requesting the advice is seeking binding commitments or approvals, then an order or consent decree shall be used.

(4) Scope of public participation. The department seeks to encourage public participation in all steps of the cleanup process. The department shall encourage a level of participation appropriate to the conditions at a facility and the level of the public's interest in the site.

(5) Scope of information. It is the department's intention that adequate information be gathered at a site to enable decisions on appropriate actions. It is also the department's intention that decisions be made and cleanups proceed expeditiously once adequate information is obtained. Studies can be performed and submittals made at varying levels of detail appropriate to the conditions at the site. Also, steps in the cleanup process may be combined to facilitate quicker cleanups, where appropriate. Flexibility in the scope of investigations and in combining steps may be particularly appropriate for routine cleanup actions. Once adequate information has been obtained, decisions shall be made within the framework provided in this chapter and in site-specific orders or decrees.

(6) Preparation of documents. Except for the initial investigation, any of the studies, reports, or plans used in the cleanup process can be prepared by either the department or the potentially liable person. The department retains all authority to review and verify the documents submitted and to make decisions based on the documents and other relevant information.

(7) Inter-agency coordination.

(a) If the department is conducting remedial actions or requiring remedial actions under an order or decree, the department shall ensure appropriate local, state, and federal agencies and tribal governments are kept informed and, as appropriate, involved in the development and implementation of remedial actions. The department may require a potentially liable person to undertake this responsibility. If the potentially liable person demonstrates that they are unable to obtain adequate involvement to allow the remedial action to proceed by a particular government agency or tribe, the department shall request the involvement of the agency or tribe.

(b) The nature and degree of coordination and consultation shall be commensurate with the other agencies' and tribes' interests and needs at the site. Interested agencies and tribes shall also be included in the mailing list for public notices under WAC 173-340-600. To facilitate coordination, it is important that agencies and tribes provide specific comments, including the identification of additional information needed or mitigating measures that are necessary or desirable to satisfy their concerns.

(c) In order to provide for expeditious cleanup actions, all federal, state, local agencies, and tribes are encouraged to coordinate when providing notices, holding meetings and hearings, and preparing documents. Whenever reasonable, the department shall coordinate and combine its activities with other agencies and tribes to minimize the duplication of notices, hearings and preparation of documents, unless otherwise prohibited.

(8) State Environmental Policy Act. See chapter 197-11 WAC for the State Environmental Policy Act requirements pertaining to the implementation of the Model Toxics Control Act.

(9) Appeals. Unless otherwise indicated all department decisions made under this chapter are remedial decisions and may be appealed only as provided for in RCW 70.105D.060.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-130, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-130, filed 4/3/90, effective 5/4/90.]

WAC 173-340-140 Deadlines. (1) Purpose. It is the department's intent to move sites through the cleanup process as expeditiously as possible. However, the department is limited by the amount of personnel and funds it can expend in any given fiscal year. This section is intended to establish reasonable deadlines for remedying releases within these constraints. The department's process for ranking and setting site priorities is described in WAC 173-340-330 and 173-340-340, respectively.

(2) Initial investigation. Within ninety days of learning of a release or threatened release of a hazardous substance, the department shall complete an initial investigation under WAC 173-340-310.

(3) Further investigation. At least twice a year, the department shall determine which sites with completed initial investigations are a high priority for further investigation. At that time, the department shall schedule high priority sites for further investigations to begin within six months. This determination will be based on the best professional judgment of departmental staff. Sites may be scheduled for further investigation at any time if the department determines that the site warrants expedited action.

(4) Site assessment and ranking. For high priority sites, the department shall complete the site hazard assessment and hazard ranking within one hundred eighty days of the scheduled start date. These sites shall be identified in the department's *Site Register*. Sites not designated as a high priority shall be scheduled for future investigations and listed in the biennial report to the legislature (WAC 173-340-340). The department shall conduct at least thirty-five site hazard assessments each fiscal year until the number of sites needing site hazard assessments are reduced below this number.

(5) Site investigation. Within thirty days of ranking, the department shall designate which sites are a high priority for a remedial investigation/feasibility study and which sites are a lower priority where further action can be delayed. The department shall review these lower priority sites and provide an opportunity for public comment as part of the biennial report to the legislature (WAC 173-340-340).

(6) Remedial investigation/feasibility study. For all sites designated as a high priority, the remedial investigation/feasibility study shall be completed under WAC 173-340-350 within eighteen months of signing the order or decree. The department may extend the deadline up to twelve months if the circumstances at the site merit a longer time frame. The department shall provide the public an opportunity to comment on any extension. The department shall initiate a remedial investigation/feasibility study on at least ten sites per fiscal year.

(7) Cleanup action. The department shall select the cleanup action under WAC 173-340-360 and file a consent decree or issue an order for cleanup action for all designated high priority sites within six months of the completion of the remedial investigation/feasibility study. The department may extend the deadline for up to four months for consent decree and order discussions. The department shall provide the public with an opportunity to comment on any deadline extension.

(8) Site schedules. The department shall publish site schedules for designated high priority sites in the *Site Register* according to WAC 173-340-600(6).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-140, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-140, filed 4/3/90, effective 5/4/90.]

PART II—DEFINITIONS AND USAGE

WAC 173-340-200 Definitions. For the purpose of this chapter, the following definitions apply:

"Acute toxicity" means the ability of a hazardous substance to cause injury or death to an organism as a result of a short-term exposure to a hazardous substance.

"Agreed order" means an order issued by the department under WAC 173-340-530 with which the potentially liable person receiving the order agrees to comply. An agreed order may be used to require or approve any cleanup or other remedial actions but it is not a settlement under RCW 70.105D.-040(4) and shall not contain a covenant not to sue, or provide protection from claims for contribution, or provide eligibility for public funding of remedial actions under RCW 70.105D.-070 (2)(d)(xi).

"Aliphatic hydrocarbons" or "aliphatics" means organic compounds that are characterized by a straight, branched, or cyclic (non-benzene ring) arrangement of carbon atoms and that do not contain halogens (such as chlorine). See also "aromatic hydrocarbons."

"All practicable methods of treatment" means all technologies and/or methods currently available and demonstrated to work under similar site circumstances or through pilot studies, and applicable to the site at reasonable cost. These include "all known available and reasonable methods of treatment" (AKART) for discharges or potential discharges to waters of the state, and "best available control technologies" for releases of hazardous substances into the air resulting from cleanup actions.

"Applicable state and federal laws" means all legally applicable requirements and those requirements that the department determines, based on the criteria in WAC 173-340-710(3), are relevant and appropriate requirements.

"Area background" means the concentrations of hazardous substances that are consistently present in the environment in the vicinity of a site which are the result of human activities unrelated to releases from that site.

"Aromatic hydrocarbons" or "aromatics" means organic compounds that are characterized by one or more benzene rings, with or without aliphatic hydrocarbon substitutions of hydrogen atoms on the rings, and that do not contain halogens (such as chlorine). See also "aliphatic hydrocarbons."

"Averaging time" means the time over which the exposure is averaged. For noncarcinogens, the averaging time typically equals the exposure duration. For carcinogens, the averaging time equals the life expectancy of a person.

"Bioconcentration factor" means the ratio of the concentration of a hazardous substance in the tissue of an aquatic organism divided by the hazardous substance concentration in the ambient water in which the organism resides.

"Carcinogen" means any substance or agent that produces or tends to produce cancer in humans. For implementation of this chapter, the term carcinogen applies to substances on the United States Environmental Protection Agency lists of A (known human) and B (probable human) carcinogens, and any substance that causes a significant increased incidence of benign or malignant tumors in a single, well conducted animal bioassay, consistent with the weight of evidence approach specified in the United States Environmental Protection Agency's Guidelines for Carcinogen Risk Assessment as set forth in 51 FR 33992 et seq.

"Carcinogenic potency factor" or "CPF" means the upper 95th percentile confidence limit of the slope of the dose-response curve and is expressed in units of (mg/kg-day)-1. When derived from human epidemiological data, the carcinogenic potency factor may be a maximum likelihood estimate.

"Chronic reference dose" means an estimate (with an uncertainty spanning an order of magnitude or more) of a daily exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of adverse effects during a lifetime.

"Chronic toxicity" means the ability of a hazardous substance to cause injury or death to an organism resulting from repeated or constant exposure to the hazardous substance over an extended period of time.

"Cleanup" means the implementation of a cleanup action or interim action.

"Cleanup action" means any remedial action, except interim actions, taken at a site to eliminate, render less toxic, stabilize, contain, immobilize, isolate, treat, destroy, or remove a hazardous substance that complies with WAC 173-340-350 through 173-340-390.

"Cleanup action alternative" means one or more treatment technology, containment action, removal action, engineered control, institutional control or other type of remedial action ("cleanup action components") that, individually or, in combination, achieves a cleanup action at a site.

"Cleanup action plan" means the document prepared by the department under WAC 173-340-380 that selects the cleanup action and specifies cleanup standards and other requirements for the cleanup action.

"Cleanup level" means the concentration of a hazardous substance in soil, water, air, or sediment that is determined to be protective of human health and the environment under specified exposure conditions.

"Cleanup standards" means the standards adopted under RCW 70.105D.030 (2)(d). Establishing cleanup standards requires specification of the following:

Hazardous substance concentrations that protect human health and the environment ("cleanup levels");

The location on the site where those cleanup levels must be attained ("points of compliance"); and

Additional regulatory requirements that apply to a cleanup action because of the type of action and/or the location of the site. These requirements are specified in applicable state and federal laws and are generally established in conjunction with the selection of a specific cleanup action.

"Cohen's method" means the maximum likelihood estimate of the mean and standard deviation accounting for data below the method detection limit or practical quantitation limit using the method described in the following publications:

- Cohen, A.C., 1959. "Simplified estimators for the normal distribution when samples are singly censored or truncated." *Technometrics*. Volume 1, pages 217-237.
- Cohen, A.C., 1961. "Tables for maximum likelihood estimates: Singly truncated and singly censored samples." *Technometrics*. Volume 3, pages 535-541.

"Compliance monitoring" means a remedial action that consists of monitoring as described in WAC 173-340-410.

"Conceptual site model" means a conceptual understanding of a site that identifies potential or suspected sources of hazardous substances, types and concentrations of hazardous

substances, potentially contaminated media, and actual and potential exposure pathways and receptors. This model is typically initially developed during the scoping of the remedial investigation and further refined as additional information is collected on the site. It is a tool used to assist in making decisions at a site.

"Conducting land use planning under chapter 36.70A RCW" as used in the definition of "industrial properties," means having adopted a comprehensive plan and development regulations for the site under chapter 36.70A RCW.

"Containment" means a container, vessel, barrier, or structure, whether natural or constructed, that confines a hazardous substance within a defined boundary and prevents or minimizes its release into the environment.

"Contaminant" means any hazardous substance that does not occur naturally or occurs at greater than natural background levels.

"Curie" means the measure of radioactivity defined as that quantity of radioactive material which decays at the rate of 3.70×10^{10} transformations per second. This decay rate is nearly equivalent to that exhibited by 1 gram of radium in equilibrium with its disintegration products.

"Day" means calendar day; however, any document due on the weekend or a holiday may be submitted on the first working day after the weekend or holiday.

"Decree" means consent decree under WAC 173-340-520. "Consent decree" is synonymous with decree.

"Degradation by-products" or "decomposition by-products" means the secondary product of biological or chemical processes that break down chemicals into other chemicals. The decomposition by-products may be more or less toxic than the parent compound.

"Department" means the department of ecology.

"Developmental reference dose" means an estimate (with an uncertainty of an order of magnitude or more) of an exposure level for the human population, including sensitive subgroups, that is likely to be without an appreciable risk of developmental effects.

"Direct contact" means exposure to hazardous substances through ingestion and/or dermal contact.

"Director" means the director of ecology or the director's designee.

"Drinking water fraction" means the fraction of drinking water that is obtained or has the potential to be obtained from the site.

"Engineered controls" means containment and/or treatment systems that are designed and constructed to prevent or limit the movement of, or the exposure to, hazardous substances. Examples of engineered controls include a layer of clean soil, asphalt or concrete paving or other materials placed over contaminated soils to limit contact with contamination; a ground water flow barrier such as a bentonite slurry trench; ground water gradient control systems such as French drains or pump and treat systems; and vapor control systems.

"Environment" means any plant, animal, natural resource, surface water (including underlying sediments), ground water, drinking water supply, land surface (including tidelands and shorelands) or subsurface strata, or ambient air within the state of Washington or under the jurisdiction of the state of Washington.

"Equivalent carbon number" or "EC" means a value assigned to a fraction of a petroleum mixture, empirically derived from the boiling point of the fraction normalized to the boiling point of n-alkanes or the retention time of n-alkanes in a boiling point gas chromatography column.

"Exposure" means subjection of an organism to the action, influence, or effect of a hazardous substance (chemical agent) or physical agent.

"Exposure duration" means the period of exposure to a hazardous substance.

"Exposure frequency" means the portion of the exposure duration that an individual is exposed to a hazardous substance, expressed as a fraction. For example, if a person is exposed 260 days (five days per week for 52 weeks) over a year (365 days), the exposure frequency would be equal to: $(5 \times 50)/365 = 0.7$.

"Exposure parameters" means those parameters used to derive an estimate of the exposure to a hazardous substance.

"Exposure pathway" means the path a hazardous substance takes or could take from a source to an exposed organism. An exposure pathway describes the mechanism by which an individual or population is exposed or has the potential to be exposed to hazardous substances at or originating from a site. Each exposure pathway includes an actual or potential source or release from a source, an exposure point, and an exposure route. If the exposure point differs from the source of the hazardous substance, the exposure pathway also includes a transport/exposure medium.

"Facility" means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, or aircraft; or any site or area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located.

"Federal cleanup law" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. 9601 et seq.

"Fish diet fraction" means the percentage of the total fish and/or shellfish in an individual's diet that is obtained or has the potential to be obtained from the site.

"Food crop" means any domestic plant that is produced for the purpose of, or may be used in whole or in part for, consumption by people or livestock. This shall include nursery, root, or seedstock to be used for the production of food crops.

"Free product" means a nonaqueous phase liquid that is present in the soil, bedrock, ground water or surface water as a district separate layer. Under the right conditions, if sufficient free product is present, free product is capable of migrating independent of the direction of flow of the ground water or surface water.

"Gastrointestinal absorption fraction" means the fraction of a substance transported across the gastrointestinal lining and taken up systemically into the body.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water.

"Hazard index" means the sum of two or more hazard quotients for multiple hazardous substances and/or multiple exposure pathways.

"Hazardous sites list" means the list of hazardous waste sites maintained under WAC 173-340-330.

"Hazardous substance" means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous substance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42 U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment.

The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: Crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local law.

"Hazardous waste site" means any facility where there has been confirmation of a release or threatened release of a hazardous substance that requires remedial action.

"Hazard quotient" or "HQ" means the ratio of the dose of a single hazardous substance over a specified time period to a reference dose for that hazardous substance derived for a similar exposure period.

"Health effects assessment summary tables" or "HEAST" means a data base developed by the United States Environmental Protection Agency that provides a summary of information on the toxicity of hazardous substances.

"Henry's law constant" means the ratio of a hazardous substance's concentration in the air to its concentration in water. Henry's law constant can vary significantly with temperature for some hazardous substances. The dimensionless form of this constant is used in the default equations in this chapter.

"Highest beneficial use" means the beneficial use of a resource generally requiring the highest quality in the resource. For example, for many hazardous substances, providing protection for the beneficial use of drinking water will generally also provide protection for a great variety of other existing and future beneficial uses of ground water.

"Independent remedial actions" means remedial actions conducted without department oversight or approval and not under an order, agreed order, or consent decree.

"Indicator hazardous substances" means the subset of hazardous substances present at a site selected under WAC 173-340-708 for monitoring and analysis during any phase of remedial action for the purpose of characterizing the site or establishing cleanup requirements for that site.

"Industrial properties" means properties that are or have been characterized by, or are to be committed to, traditional industrial uses such as processing or manufacturing of materials, marine terminal and transportation areas and facilities, fabrication, assembly, treatment, or distribution of manufactured products, or storage of bulk materials, that are either:

- Zoned for industrial use by a city or county conducting land use planning under chapter 36.70A RCW (Growth Management Act); or
- For counties not planning under chapter 36.70A RCW (Growth Management Act) and the cities within them, zoned for industrial use and adjacent to properties currently used or designated for industrial purposes.

See WAC 173-340-745 for additional criteria to determine if a land use not specifically listed in this definition would meet the requirement of "traditional industrial use" and for evaluating if a land use zoning category meets the requirement of being "zoned for industrial use."

"Inhalation absorption fraction" means the percent of a hazardous substance (expressed as a fraction) that is absorbed through the respiratory system.

"Inhalation correction factor" means a multiplier that is used to adjust exposure estimates based on ingestion of drinking water to take into account exposure to hazardous substances that are volatilized and inhaled during use of the water.

"Initial investigation" means a remedial action that consists of an investigation under WAC 173-340-310.

"Institutional controls" means measures undertaken to limit or prohibit activities that may interfere with the integrity of an interim action or a cleanup action or result in exposure to hazardous substances at the site. For examples of institutional controls see WAC 173-340-440(1).

"Integrated risk information system" or "IRIS" means a data base developed by the United States Environmental Protection Agency that provides a summary of information on hazard identification and dose-response assessment for specific hazardous substances.

"Interim action" means a remedial action conducted under WAC 173-340-430.

"Interspecies scaling factor" means the conversion factor used to take into account differences between animals and humans.

"Land's method" means the method for calculating an upper confidence limit for the mean of a lognormal distribution, described in the following publications:

• Land, C.E., 1971. "Confidence intervals for linear functions of the normal mean and variance." *Annals of Mathematics and Statistics*. Volume 42, pages 1187-1205.

• Land, C.E., 1975. "Tables of confidence limits for linear functions of the normal mean and variance." In: *Selected Tables in Mathematical Statistics*, Volume III, pages 385-419. American Mathematical Society, Providence, Rhode Island.

"Legally applicable requirements" means those cleanup standards, standards of control, and other human health and environmental protection requirements, criteria, or limitations adopted under state or federal law that specifically address a hazardous substance, cleanup action, location, or other circumstances at the site.

"Lowest observed adverse effect level" or "LOAEL" means the lowest concentration of a hazardous substance at which there is a statistically or biologically significant increase in the frequency or severity of an adverse effect between an exposed population and a control group.

"Mail" means delivery through the United States Postal Service or an equivalent method of delivery or transmittal, including private mail carriers, or personal delivery.

"Maximum contaminant level" or "MCL" means the maximum concentration of a contaminant established by either the Washington state board of health or the United States Environmental Protection Agency under the Federal Safe Drinking Water Act (42 U.S.C. 300f et seq.) and published in chapter 248-54 WAC or 40 C.F.R. 141.

"Maximum contaminant level goal" or "MCLG" means the maximum concentration of a contaminant established by either the Washington state board of health or the United States Environmental Protection Agency under the Federal Safe Drinking Water Act (42 U.S.C. 300f et seq.) and published in chapter 248-54 WAC or 40 C.F.R. 141 for which no known or anticipated adverse effects on human health occur, including an adequate margin of safety.

"Method detection limit" or "MDL" means the minimum concentration of a compound that can be measured and reported with ninety-nine percent (99%) confidence that the value is greater than zero.

"Millirem" or "mrem" means the measure of the dose of any radiation to body tissue in terms of its estimated biological effect relative to a dose received from an exposure to one roentgen (R) of x-rays. One millirem equals 0.001 rem.

"Mixed funding" means any funding provided to potentially liable persons from the state toxics control account under WAC 173-340-560.

"Model Toxics Control Act" or "act" means chapter 70.105D RCW, first passed by the voters in the November 1988 general election as Initiative 97 and as since amended by the legislature.

"Natural attenuation" means a variety of physical, chemical or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of hazardous substances in the environment. These in situ processes include: Natural biodegradation; dispersion; dilution; sorption; volatilization; and, chemical or biological stabilization, transformation, or destruction of hazardous substances. See WAC 173-340-370(7) for a description of the expected role of natural attenuation in site cleanup. A cleanup action that includes natural attenuation and conforms to the expectation in WAC 173-340-370(7) can be considered an active remedial measure.

"Natural background" means the concentration of hazardous substance consistently present in the environment that has not been influenced by localized human activities. For example, several metals and radionuclides naturally occur in the bedrock, sediments, and soils of Washington state due solely to the geologic processes that formed these materials and the concentration of these hazardous substances would be considered natural background. Also, low concentrations of some particularly persistent organic compounds such as polychlorinated biphenyls (PCBs) can be found in surficial soils and sediment throughout much of the state due to global distribution of these hazardous substances. These low concentrations would be considered natural background. Similarly, concentrations of various radionuclides that are present at low concentrations throughout the state due to global distribution of fallout from bomb testing and nuclear accidents would be considered natural background.

"Natural biodegradation" means in-situ biological processes such as aerobic respiration, anaerobic respiration, and co-metabolism, that occur without human intervention and that break down hazardous substances into other compounds or elements. The process is typically a multiple step process and may or may not result in organic compounds being completely broken down or mineralized to carbon dioxide and water.

"Natural person" means any unincorporated individual or group of individuals. The term "individual" is synonymous with "natural person."

"Nonaqueous phase liquid" or "NAPL" means a hazardous substance that is present in the soil, bedrock, ground water or surface water as a liquid not dissolved in water. The term includes both light nonaqueous phase liquid (LNAPL) and dense nonaqueous phase liquid (DNAPL).

"No observed adverse effect level" or "NOAEL" means the exposure level at which there are no statistically or biologically significant increases in frequency or severity of adverse effects between the exposed population and its appropriate control; some effects may be produced at this level, but they are not considered to be adverse, nor precursors to specific adverse effects.

"Nonpotable" means not a current or potential source of drinking water. See WAC 173-340-720 and 173-340-730 for criteria for determining if ground water or surface water is a current or potential source of drinking water.

"Null hypothesis" means an assumption about hazardous substance concentrations at a site when evaluating compliance with cleanup levels established under this chapter. The null hypothesis is that the site is contaminated at concentrations that exceed cleanup levels. This shall not apply to cleanup levels based on background concentrations where other appropriate statistical methods supported by a power analysis would be more appropriate to use.

"Oral RFD conversion factor" means the conversion factor used to adjust an oral reference dose (which is typically based on an administered dose) to a dermal reference dose (which is based on an absorbed dose).

"Order" means an enforcement order issued under WAC 173-340-540 or an agreed order issued under WAC 173-340-530.

"Owner or operator" means any person that meets the definition of this term in RCW 70.105D.020(12).

"PAHs (carcinogenic)" or "cPAHs" means those polycyclic aromatic hydrocarbons substances, PAHs, identified as A (known human) or B (probable human) carcinogens by the United States Environmental Protection Agency. These include benzo(a)anthracene, benzo(b)fluoranthene, benzo(k) fluoranthene, benzo(a)pyrene, chrysene, dibenzo(a,h) anthracene, and indeno(1,2,3-cd)pyrene.

"Permanent solution" or "permanent cleanup action" means a cleanup action in which cleanup standards of WAC 173-340-700 through 173-340-760 can be met without further action being required at the site being cleaned up or any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

"Person" means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, state government agency, unit of local government, federal government agency, or Indian tribe.

"Picocurie" or "pCi" means 10^{-12} curie.

"Point of compliance" means the point or points where cleanup levels established in accordance with WAC 173-340-720 through 173-340-760 shall be attained. This term includes both standard and conditional points of compliance. A conditional point of compliance for particular media is only available as provided in WAC 173-340-720 through 173-340-760.

"Polychlorinated biphenyls" or "PCB mixtures" means those aromatic compounds containing two benzene nuclei with two or more substituted chlorine atoms. For the purposes of this chapter, PCB includes those congeners which are identified using the appropriate analytical methods as specified in WAC 173-340-830.

"Polycyclic aromatic hydrocarbons" or "PAH" means those hydrocarbon molecules composed of two or more fused benzene rings. For the purpose of this chapter, PAH includes those compounds which are identified and quantified using the appropriate analytical methods as specified in WAC 173-340-830. The specific compounds generally included are acenaphthene, acenaphthylene, fluorene, naphthalene, anthracene, fluoranthene, phenanthrene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, pyrene, chrysene, benzo[a]pyrene, dibenzo[a,h]anthracene, indeno[1,2,3-cd]pyrene, and benzo[ghi]perylene.

"Potentially liable person" means any person who the department finds, based on credible evidence, to be liable under RCW 70.105D.040.

"Practicable" means capable of being designed, constructed and implemented in a reliable and effective manner including consideration of cost. When considering cost under this analysis, an alternative shall not be considered practicable if the incremental costs of the alternative are disproportionate to the incremental degree of benefits provided by the alternative over other lower cost alternatives.

"Practical quantitation limit" or "PQL" means the lowest concentration that can be reliably measured within specified limits of precision, accuracy, representativeness, completeness, and comparability during routine laboratory operating conditions, using department approved methods.

"Probabilistic risk assessment" means a mathematical technique for assessing the variability and uncertainty in risk calculations. This is done by using distributions for model input parameters, rather than point values, where sufficient data exists to justify the distribution. These distributions are then used to compute various simulations using tools such as Monte Carlo analysis to examine the probability that a given outcome will result (such as a level of risk being exceeded). When using probabilistic techniques under this chapter for human health risk assessment, distributions shall not be used to represent dose response relationships (reference dose, reference concentration, cancer potency factor).

"Public notice" means, at a minimum, adequate notice mailed to all persons who have made a timely request of the department and to persons residing in the potentially affected vicinity of the proposed action; mailed to appropriate news media; published in the newspaper of largest circulation in the city or county of the proposed action; and opportunity for interested persons to comment.

"Public participation plan" means a plan prepared under WAC 173-340-600 to encourage coordinated and effective public involvement tailored to the public's needs at a particular site.

"Rad" means that quantity of ionizing radiation that results in the absorption of 100 ergs of energy per gram of irradiated material, regardless of the source of radiation.

"Radionuclide" means a type of atom that spontaneously undergoes radioactive decay. Radionuclides are hazardous substances under the act.

"Reasonable maximum exposure" means the highest exposure that can be reasonably expected to occur for a human or other living organisms at a site under current and potential future site use.

"Reference dose" or "RFD" means a benchmark dose, derived from the NOAEL or LOAEL for a hazardous substance by consistent application of uncertainty factors used to estimate acceptable daily intake doses and an additional modifying factor, which is based on professional judgment when considering all available data about a substance, expressed in units of milligrams per kilogram body weight per day. This includes chronic reference doses, subchronic reference doses, and developmental reference doses.

"Release" means any intentional or unintentional entry of any hazardous substance into the environment, including but not limited to the abandonment or disposal of containers of hazardous substances.

"Relevant and appropriate requirements" means those cleanup standards, standards of control, and other human health and environmental requirements, criteria, or limitations established under state and federal law that, while not legally applicable to the hazardous substance, cleanup action, location, or other circumstance at a site, the department determines address problems or situations sufficiently similar to those encountered at the site that their use is well suited to the particular site. The criteria specified in WAC 173-340-710(3) shall be used to determine if a requirement is relevant and appropriate.

"Rem" means the unit of radiation dose equivalent that is the dosage in rads multiplied by a factor representing the different biological effects of various types of radiation.

"Remedial investigation/feasibility study" means a remedial action that consists of activities conducted under WAC 173-340-350 to collect, develop, and evaluate sufficient information regarding a site to select a cleanup action under WAC 173-340-360 through 173-340-390.

"Remediation level (REL)" means a concentration (or other method of identification) of a hazardous substance in soil, water, air, or sediment above which a particular cleanup action component will be required as part of a cleanup action at a site. Other methods of identification include physical appearance or location. A cleanup action selected in accordance with WAC 173-340-350 through 173-340-390 that includes remediation levels constitutes a cleanup action which is protective of human health and the environment. See WAC 173-340-355 for a description of the purpose of remediation levels and the requirements and procedures for devel-

oping a cleanup action alternative that includes remediation levels.

"Remedy" or "remedial action" means any action or expenditure consistent with the purposes of chapter 70.105D RCW to identify, eliminate, or minimize any 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.

"Restoration time frame" means the period of time needed to achieve the required cleanup levels at the points of compliance established for the site.

"Risk" means the probability that a hazardous substance, when released into the environment, will cause an adverse effect in exposed humans or other living organisms.

"Routine cleanup action" means a remedial action meeting all of the following criteria:

- Cleanup standards for each hazardous substance addressed by the cleanup are obvious and undisputed, and allow for an adequate margin of safety for protection of human health and the environment;
- It involves an obvious and limited choice among cleanup action alternatives and uses an alternative that is reliable, has proven capable of accomplishing cleanup standards, and with which the department has experience;
- The cleanup action does not require preparation of an environmental impact statement; and
- The site qualifies under WAC 173-340-7491 for an exclusion from conducting a simplified or site-specific terrestrial ecological evaluation, or if the site qualifies for a simplified ecological evaluation, the evaluation is ended under WAC 173-340-7492(2) or the values in Table 749-2 are used.

Routine cleanup actions consist of, or are comparable to, one or more of the following remedial actions:

- Cleanup of above-ground structures;
- Cleanup of below-ground structures;
- Cleanup of contaminated soils where the action would restore the site to cleanup levels; or
- Cleanup of solid wastes, including containers.

"Safety and health plan" means a plan prepared under WAC 173-340-810.

"Sampling and analysis plan" means a plan prepared under WAC 173-340-820.

"Saturated zone" means the area below the water table in which all interstices are filled with water.

"Schools" means preschools, elementary schools, middle schools, high schools, and similar facilities, both public and private, used primarily for the instruction of minors.

"Science advisory board" means the advisory board established by the department under RCW 70.105D.030(4).

"Secondary maximum contaminant level" means the maximum concentration of a secondary contaminant in water established by the United States Environmental Protection Agency under the Federal Safe Drinking Water Act (42 U.S.C. 300f et seq.) and published in 40 C.F.R. 143.

"Sensitive environment" means an area of particular environmental value, where a release could pose a greater threat than in other areas including: 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.

"Site" means the same as "facility."

"Site hazard assessment" means a remedial action that consists of an investigation performed under WAC 173-340-320.

"Soil" means a mixture of organic and inorganic solids, air, water, and biota that exists on the earth's surface above bedrock, including materials of anthropogenic sources such as slag, sludge, etc.

"Soil biota" means invertebrate multicellular animals that live in the soil or in close contact with the soil.

"Subchronic reference dose" means an estimate (with an uncertainty of an order of magnitude or more) of a daily exposure level for the human population, including sensitive subgroups, that is likely to be without appreciable risk of adverse effects during a portion of a lifetime.

"Surface water" means lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the state of Washington or under the jurisdiction of the state of Washington.

"Technically possible" means capable of being designed, constructed and implemented in a reliable and effective manner, regardless of cost.

"Terrestrial ecological receptors" means plants and animals that live primarily or entirely on land.

"Threatened or endangered species" means species listed as threatened or endangered under the federal Endangered Species Act 16 U.S.C. Section 1533, or classified as threatened or endangered by the state fish and wildlife commission under WAC 232-12-011(1) and 232-12-014.

"Total excess cancer risk" means the upper bound on the estimated excess cancer risk associated with exposure to multiple hazardous substances and multiple exposure pathways.

"Total petroleum hydrocarbons" or "TPH" means any fraction of crude oil that is contained in plant condensate, crankcase motor oil, gasoline, aviation fuels, kerosene, diesel motor fuel, benzol, fuel oil, and other products derived from the refining of crude oil. For the purposes of this chapter, TPH will generally mean those fractions of the above products that are the total of all hydrocarbons quantified by analytical methods NWTPH-Gx; NWTPH-Dx; volatile petroleum hydrocarbons (VPH) for volatile aliphatic and volatile aromatic petroleum fractions; and extractable petroleum hydrocarbons (EPH) for nonvolatile aliphatic and nonvolatile aromatic petroleum fractions, as appropriate, or other test methods approved by the department.

"Type I error" means the error made when it is concluded that an area of a site is below cleanup levels when it actually exceeds cleanup levels. This is the rejection of a true null hypothesis.

"Underground storage tank" or "UST" means an underground storage tank and connected underground piping as defined in the rules adopted under chapter 90.76 RCW.

"Unrestricted site use conditions" means restrictions on the use of the site or natural resources affected by releases of hazardous substances from the site are not required to ensure continued protection of human health and the environment.

"Upper bound on the estimated excess cancer risk of one in one hundred thousand" means the upper ninety-fifth percent confidence limit on the estimated risk of one additional cancer above the background cancer rate per one hundred thousand individuals.

"Upper bound on the estimated excess cancer risk of one in one million" means the upper ninety-fifth percent confidence limit on the estimated risk of one additional cancer above the background cancer rate per one million individuals.

"Volatile organic compound" means those carbon-based compounds listed in EPA methods 502.2, 524.2, 551, 601, 602, 603, 624, 1624C, 1666, 1671, 8011, 8015B, 8021B, 8031, 8032A, 8033, 8260B, and those with similar vapor pressures or boiling points. See WAC 173-340-830(3) for references describing these methods. For petroleum, volatile means aliphatic and aromatic constituents up to and including EC12, plus naphthalene, 1-methylnaphthalene and 2-methylnaphthalene.

"Wastewater facility" means all structures and equipment required to collect, transport, treat, reclaim, or dispose of domestic, industrial, or combined domestic/industrial wastewaters.

"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. For the purposes of this classification, wetlands must have one or more of the following attributes at least periodically, the land supports predominantly hydrophytes; the substrate is predominately undrained hydric soil; and the substrate is nonsoil and saturated with water or covered by shallow water at some time during the growing season each year.

"Wildlife" means any nonhuman vertebrate animal other than fish.

"Zoned for (a specified) use" means the use is allowed as a permitted or conditional use under the local jurisdiction's land use zoning ordinances. A land use that is inconsistent with the current zoning but allowed to continue as a nonconforming use or through a comparable designation is not considered to be zoned for that use.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-200, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-200, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-200, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-200, filed 4/3/90, effective 5/4/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-210 Usage. For the purposes of this chapter, the following shall apply:

(1) Unless the context clearly requires otherwise the use of the singular shall include the plural and conversely.

(2) The terms "applicable," "appropriate," "relevant," "unless otherwise directed by the department" and similar terms implying discretion mean as determined by the department, with the burden of proof on other persons to demonstrate that the requirements are or are not necessary.

(3) "Approved" means for department conducted or ordered remedial actions, or for potentially liable person conducted cleanups agreed to by the department in an agreed order or decree governing remedial actions at the site.

(4) "Conduct" means to perform or undertake whether directly or through an agent or contractor, unless this chapter expressly provides otherwise.

(5) "Include" means included but not limited to.

(6) "May" or "should" means the provision is optional and permissive, and does not impose a requirement.

(7) "Shall," "must," or "will" means the provision is mandatory.

(8) "Threat" means threat or potential threat.

(9) "Under" means pursuant to, subject to, required by, established by, in accordance with, and similar expressions of legislative or administrative authorization or direction.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-210, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-210, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-210, filed 4/3/90, effective 5/4/90.]

PART III—SITE REPORTS AND CLEANUP DECISIONS

WAC 173-340-300 Site discovery and reporting. (1) Purpose. As part of a program to identify hazardous waste sites, this section sets forth the requirements for reporting a release of a hazardous substance due to past activities, whether discovered before or after the effective date of this regulation. It also sets forth the requirements for reporting independent remedial actions. The department may take any other actions it deems appropriate to identify potential hazardous waste sites consistent with chapter 70.105D RCW.

(2) Release report.

(a) Any owner or operator who has information that a hazardous substance has been released to the environment at the owner or operator's facility and may be a threat to human health or the environment shall report such information to the department within ninety days of discovery. Releases from underground storage tanks shall be reported by the owner or operator of the underground storage tank within twenty-four hours of release confirmation, in accordance with WAC 173-340-450. To the extent known, the report shall include:

(i) The identification and location of the hazardous substance;

(ii) Circumstances of the release and the discovery; and

(iii) Any remedial actions planned, completed, or underway. All other persons are encouraged to report such information to the department.

(b) Persons should use best professional judgment in deciding whether a release of a hazardous substance may be a threat or potential threat to human health or the environment. The following, which is not an exhaustive list, are examples of situations that generally should be reported under this section:

(i) Contamination in a water supply well.

(ii) Contaminated seeps, sediment or surface water.

(iii) Vapors in a building, utility vault or other structure that appear to be entering the structure from nearby contaminated soil or ground water.

(iv) Free product such as petroleum product or other organic liquids on the surface of the ground or in the ground water.

(v) Any contaminated soil or unpermitted disposal of waste materials that would be classified as a hazardous waste under federal or state law.

(vi) Any abandoned containers such as drums or tanks, above ground or buried, still containing more than trace residuals of hazardous substances.

(vii) Sites where unpermitted industrial waste disposal has occurred.

(viii) Sites where hazardous substances have leaked or been dumped on the ground.

(ix) Leaking underground petroleum storage tanks not already reported under WAC 173-340-450.

(3) Exemptions. The following releases are exempt from these notification requirements:

(a) Application of pesticides and fertilizers for their intended purposes and according to label instructions;

(b) Lawful and nonnegligent use of hazardous substances by a natural person for personal or domestic purposes;

(c) A release in accordance with a permit that authorizes the release;

(d) A release previously reported to the department in fulfillment of a reporting requirement in this chapter or in another law or regulation;

(e) A release previously reported to the United States Environmental Protection Agency under CERCLA, Section 103(c) (42 U.S.C. Sec. 9603(c));

(f) Except for releases under subsection (2)(b)(iii) of this section, a release to the air;

(g) Releases discovered in public water systems regulated by the department of health; or

(h) A release to a permitted wastewater facility.

An exemption from the notification requirements in this section does not imply a release from liability under this chapter.

(4) Report of independent remedial actions.

See WAC 173-340-515 for additional reporting requirements for independent remedial actions. See WAC 173-340-450 for reporting requirements for independent remedial actions for releases from underground storage tanks.

(5) Department response. Within ninety days of receiving information under this section, the department shall conduct an initial investigation in accordance with WAC 173-340-310. For sites on the hazardous sites list, the department shall, as resources permit, review reports that document independent cleanup actions. The review shall include an evaluation of whether the site qualifies for removal from the hazardous sites list or whether further remedial action is required.

(6) Other obligations. Nothing in this section shall eliminate any obligations to comply with reporting requirements that may exist in a permit or under other laws.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-300, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-300, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-300, filed 4/3/90, effective 5/4/90.]

WAC 173-340-310 Initial investigation. (1) Purpose. An initial investigation is an inspection of a suspected site by the department and documentation of conditions observed during that site inspection. The purpose of the initial investigation is to determine whether a release or threatened release of a hazardous substance may have occurred that warrants further action under this chapter.

(2) Applicability and timing. Whenever 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 conduct an initial investigation within ninety days.

(3) Exemptions. The department shall not be required to conduct an initial investigation when:

(a) The circumstances associated with the release or threatened release are known to the department and have previously been or currently are being evaluated by the department or other government agency;

(b) The release is permitted; or

(c) The release is exempt from reporting under WAC 173-340-300(3).

(4) Department deferral to others. The department may rely on another government agency or a contractor to the department to conduct an initial investigation on its behalf, provided the department determines such an agency or contractor is not suspected to have contributed to the release or threatened release of a hazardous substance and that no conflict of interest exists.

(5) Department decision. Based on the information obtained about the site, the department shall within thirty days of completion of the initial investigation make one or more of the following decisions:

(a) A site hazard assessment is required;

(b) Emergency remedial action is required;

(c) Interim action is required; or

(d) The site requires no further action under this chapter at this time because either:

(i) There has been no release or threatened release of a hazardous substance; or

(ii) A release or threatened release of a hazardous substance has occurred, but in the department's judgment, does not pose a threat to human health or the environment; or

(iii) Action under another authority is appropriate.

A decision for a particular follow-up action does not preclude the department from requiring some other action in the future based on reevaluation of the site or additional information.

(6) Notification.

(a) Sites requiring an emergency remedial action or interim action. If the department determines that an emergency remedial action or interim action is required, then notification of the threat to the potentially affected vicinity may be required by the department. The method and nature of the notification shall be determined on a case-by-case basis using the methods specified in WAC 173-340-600. Such notification shall be the responsibility of the site owner or operator if required in writing by the department.

(b) Sites requiring further remedial action. For sites requiring further remedial action under chapter 70.105D RCW, the department shall notify the owner, operator, and any potentially liable person known to the department of its decision. This notification shall be a letter ("Early Notice Letter") mailed to the person which includes:

(i) The basis for the department's decision;

(ii) Information on the cleanup process provided for in this chapter;

(iii) A statement that it is the department's policy to work cooperatively with persons to accomplish prompt and effective cleanups;

(iv) A person or office of the department to contact regarding the contents of the letter; and

(v) A statement that the letter is not a determination of liability and that cooperating with the department in planning or conducting a remedial action is not an admission of guilt or liability.

(c) Sites not requiring further remedial action. For sites requiring no further remedial action under chapter 70.105D RCW, if requested by the owner or operator, the department shall notify the owner or operator of the department's conclusion. This notification shall be in writing and may be combined with the determination of status letter in WAC 173-340-500.

(7) Reservation of rights. Nothing in this section shall preclude the department from taking or requiring appropriate remedial action at any time.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-310, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-310, filed 4/3/90, effective 5/4/90.]

WAC 173-340-320 Site hazard assessment. (1) Purpose. The purpose of the site hazard assessment is to provide sufficient sampling data and other information for the department to:

(a) Confirm or rule out that a release or threatened release of a hazardous substance has occurred;

(b) Identify the hazardous substance and provide some information regarding the extent and concentration of the substance;

(c) Identify site characteristics that could result in the hazardous substance entering and moving through the environment;

(d) Evaluate the potential for the threat to human health and the environment; and

(e) Determine the hazard ranking of the site under WAC 173-340-330, if appropriate.

(2) Timing. Generally, a site hazard assessment shall be completed before proceeding to any subsequent phase of remedial action, other than an emergency or interim action.

(3) Administrative options. The site hazard assessment may be conducted under any of the procedures described in WAC 173-340-510. The department may rely on another government agency or a contractor to the department to conduct a site hazard assessment on its behalf, provided the department determines such an agency or contractor is not suspected to have contributed to the release or threatened release of a hazardous substance and that no conflict of interest exists.

(4) Scope and content. A site hazard assessment is an early study to provide preliminary data regarding the relative potential hazard of the site. A site hazard assessment is not intended to be a detailed site characterization; however, it shall include sufficient sampling, site observations, maps, and other information needed to meet the purposes specified in subsection (1) of this section. To fulfill this requirement, a site hazard assessment shall include, as appropriate, the following information:

(a) Identification of hazardous substances, including what was released and is threatened to be released and/or, if known, what products of decomposition, recombination, or chemical reaction are currently present on site, and an estimate of their quantities and concentrations;

(b) Evidence confirming a release or threatened release of hazardous substances to the environment;

(c) Description of facilities containing releases, if any, and their condition;

(d) Identification of the location of all areas where a hazardous substance is known or suspected to be, indicated on a site map;

(e) Consideration of surface water run-on and run-off and the hazardous substances leaching potential;

(f) Preliminary characterization of the subsurface and ground water actually or potentially affected by the release, including vertical depth to ground water and distance to nearby wells, bodies of surface water, and drinking water intakes;

(g) Preliminary evaluation of receptors, including: Human population, food crops, recreation areas, parks, sensitive environments, irrigated areas, and aquatic resources currently or potentially affected by ground water, air, or surface water containing the release of hazardous substances at the site, including distances to these receptors; and

(h) Any other physical factors which may be significant in estimating the potential or current exposure to sensitive biota.

(5) Guidance. The department shall make available guidance for how to conduct a site hazard assessment to meet the requirements of this section. Persons are encouraged to contact the department to obtain a copy of the latest guidance.

(6) Department decision. Based on the results of the site hazard assessment and other available information about the site, the department shall either determine the site warrants no further action using the criteria in WAC 173-340-310 (5)(d) or proceed with ranking and placing the site on the hazardous sites list under WAC 173-340-330.

(7) Notification. The department shall make available the results of the site hazard assessment to the site's owner and operator and any person who has received a potentially liable person status letter under WAC 173-340-500 regarding the site. If the department finds after a site hazard assessment that the site requires no further action, it shall publish this decision in the *Site Register*.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-320, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-320, filed 4/3/90, effective 5/4/90.]

WAC 173-340-330 Hazard ranking and the hazardous sites list. (1) Purpose. The department shall maintain a list of sites where remedial action has been determined by the department to be necessary. This list, called the hazardous sites list, shall fulfill the department's responsibilities under RCW 70.105D.030 (2)(b) and (3). From this list, the department shall select those sites where action is anticipated and

include those in the biennial program report under WAC 173-340-340.

(2) Hazard ranking.

(a) The department shall give a hazard ranking to sites placed on the list. The purpose of hazard ranking is to estimate, based on the information compiled during the site hazard assessment, the relative potential risk posed by the site to human health and the environment. This assessment considers air, ground water, and surface water migration pathways, human and nonhuman exposure targets, properties of the substances present, and the interaction of these variables.

(b) The department shall evaluate each site on a consistent basis using the procedure described in the "*Washington Ranking Method Scoring Manual,*" publication number 90-14, dated April 1992. The sediment component of a site shall be scored using the procedures described in "*Sediment Ranking System,*" publication number 97-106, dated January 1990, and *"Status Report: Technical Basis for SEDRANK Modifications,"* publication number 97-107, dated June 1991. The ranking procedure and major amendments to the manual shall be reviewed by the science advisory board established under chapter 70.105D RCW. Information obtained in the site hazard assessment, plus any additional data specified in these publications, shall be included in the hazard ranking evaluation.

(3) *Site Register.* The department shall periodically provide notification of the results of hazard ranking in the *Site Register.* The department shall make available hazard ranking results for each site to the site owner and operator and any potentially liable person known to the department before publication in the *Site Register.*

(4) Reranking. The department may at its discretion rerank a site if, before the initiation of state action at the site, the department receives additional information within the scope of the evaluation criteria which indicates that a significant change in rank may result.

(5) Listing.

Sites shall be ranked and placed on the hazardous sites list if, after the completion of a site hazard assessment, the department determines that further action is required at the site. The list shall be updated at least once per year. Placement of a site on the hazardous sites list does not, by itself, imply that persons associated with the site are liable under chapter 70.105D RCW.

(6) Site status. The hazardous sites list shall reflect the current status of remedial action at each site. The department may change a site's status to reflect current conditions. The status for each site shall be identified as one of the following:

(a) Sites awaiting further remedial action;

(b) Sites with remedial action in progress;

(c) Sites where a cleanup action has been conducted but confirmational monitoring is underway;

(d) Sites with independent remedial actions; or

(e) Other categories established by the department.

(7) Removing sites from the list.

(a) The department may remove a site from the list only after it has determined that:

(i) For sites where the selected cleanup action does not include containment, all remedial actions except confirmational monitoring have been completed and compliance with the cleanup standards has been achieved at the site;

(ii) The listing was erroneous; or

(iii) For sites where the selected cleanup action includes containment, if all of the following conditions have been met:

(A) All construction and operation of remedial actions have been adequately completed and:

(I) Only passive maintenance activities such as monitoring, inspections and periodic repairs remain; or

(II) For municipal solid waste landfills only, a closure plan meeting the substantive requirements in chapter 173-351 WAC has been approved by the department as part of a remedial action under this chapter and the only remaining active maintenance activities are methane gas control, the operation of leachate collection and treatment systems, and/or surface water diversion;

(B) Sufficient confirmational monitoring has been done to demonstrate that the remedy has effectively contained the hazardous substances of concern at the site;

(C) All required performance monitoring has been completed;

(D) Any required institutional controls are in place and have been demonstrated to be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action;

(E) Written documentation is present in the department files that describes what hazardous substances have been left on site, where they are located, and the long term monitoring and maintenance obligations at the site;

(F) When required under WAC 173-340-440, financial assurances are in place; and

(G) For sites with releases to ground water, it has been demonstrated the site meets ground water cleanup levels at the designated point of compliance.

(b) A site owner, operator, or potentially liable person may request that a site be removed from the list by submitting a petition to the department. The petition shall include thorough documentation of all investigations performed, all cleanup actions taken, and adequate compliance monitoring to demonstrate to the department's satisfaction that one of the conditions in (a) of this subsection has been met. The department may require payment of costs incurred, including an advance deposit, for review and verification of the work performed. The department shall review such petitions; however, the timing of the review shall be at its discretion and as resources may allow.

(8) Record of sites. The department shall maintain a record of sites that have been removed from the list under subsection (7) of this section. The record shall identify which sites have institutional controls under WAC 173-340-440 and which sites are subject to periodic review under WAC 173-340-420. This record will be made available to the public upon request.

(9) Relisting of sites. The department may relist a site that has previously been removed if it determines that the site requires further remedial action.

(10) Notice. The department shall provide public notice and an opportunity to comment when the department proposes to remove a site from the list. Additions to the list,

changes in site status, and removal from the list shall be published in the *Site Register*.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-330, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-330, filed 4/3/90, effective 5/4/90.]

WAC 173-340-340 Biennial program report. (1) Timing. Before November 1 of each even-numbered year, the department shall prepare a biennial program report for the legislature containing its plan for conducting remedial actions for the following two fiscal years. This report shall identify the projects and expenditures recommended for appropriation from both the state and local toxics control accounts. In determining which sites the department shall consider for planned action, emphasis shall be given to sites posing the highest risk to human health and the environment, as indicated by a site's hazard ranking. The department may also consider other factors in setting site priorities. After legislative action and any revisions, this report shall become the department's biennial program plan.

(2) Public notice. The department shall provide public notice and a hearing on the proposed plan. For purposes of this subsection only, public notice shall consist of mailings to all persons who have made a timely request and to the appropriate news media, and publication in the state register. Notice shall also be provided in the *Site Register*. The public comment period on the proposed plan shall run for at least thirty days from the date of the publication in the *Site Register*.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-340, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-340, filed 4/3/90, effective 5/4/90.]

WAC 173-340-350 Remedial investigation and feasibility study. (1) Purpose. The purpose of a remedial investigation/feasibility study is to collect, develop, and evaluate sufficient information regarding a site to select a cleanup action under WAC 173-340-360 through 173-340-390.

(2) Timing. Unless otherwise directed by the department, a remedial investigation/feasibility study shall be completed before selecting a cleanup action under WAC 173-340-360 through 173-340-390, except for an emergency or interim action.

(3) Administrative options. A remedial investigation/feasibility study may be conducted under any of the procedures described in WAC 173-340-510 and 173-340-515.

(4) Submittal requirements. For a remedial action conducted by the department or under a decree or order, a report shall be prepared at the completion of the remedial investigation/feasibility study. Additionally, the department may require reports to be submitted for discrete elements of the remedial investigation/feasibility study. Reports prepared under this section and under an order or decree shall be submitted to the department for review and approval. See also subsection (7)(c)(iv) of this section for information on the sampling and analysis plan and the safety and health plan. See WAC 173-340-515(4) for submittal requirements for independent remedial actions.

(5) Public participation. Public participation will be accomplished in a manner consistent with WAC 173-340-600.

(6) Scope. The scope of a remedial investigation/feasibility study varies from site to site, depending on the informational and analytical needs of the specific facility. This requires that the process remain flexible and be streamlined when possible to avoid the collection and evaluation of unnecessary information so that the cleanup can proceed in a timely manner. Where information required in subsections (7)(c) and (8)(c) of this section is available in other documents for the site, that information may be incorporated by reference to avoid unnecessary duplication. However, in all cases sufficient information must be collected, developed, and evaluated to enable the selection of a cleanup action under WAC 173-340-360 through 173-340-390. In addition, for facilities on the federal national priorities list, a remedial investigation/feasibility study shall comply with federal requirements.

(7) Procedures for conducting a remedial investigation.

(a) Purpose. The purpose of the remedial investigation is to collect data necessary to adequately characterize the site for the purpose of developing and evaluating cleanup action alternatives. Site characterization may be conducted in one or more phases to focus sampling efforts and increase the efficiency of the remedial investigation. Site characterization activities may be integrated with the development and evaluation of alternatives in the feasibility study, as appropriate.

(b) Scoping activities. To focus the collection of data and to assist the department in making the preliminary evaluation required under the State Environmental Policy Act (see WAC 197-11-256), the following scoping activities may be taken before conducting a remedial investigation:

(i) Assemble and evaluate existing data on the site, including the results of any interim or emergency actions, initial investigations, site hazard assessments, and other site inspections;

(ii) Develop a preliminary conceptual site model as defined in WAC 173-340-200;

(iii) Begin to identify likely cleanup levels for the site;

(iv) Begin to identify likely cleanup action components that may address the releases at the site;

(v) Consider the type, quality and quantity of data necessary to support selection of a cleanup action; and

(vi) Begin to identify likely applicable state and federal laws under WAC 173-340-710.

(c) Content. A remedial investigation shall include the following information as appropriate:

(i) General facility information. General information, including: Project title; name, address, and phone number of project coordinator; legal description of the facility location; dimensions of the facility; present owner and operator; chronological listing of past owners and operators and operational history; and other pertinent information.

(ii) Site conditions map. An existing site conditions map that illustrates relevant current site features such as property boundaries, proposed facility boundaries, surface topography, surface and subsurface structures, utility lines, well locations, and other pertinent information.

(iii) Field investigations. Sufficient investigations to characterize the distribution of hazardous substances present at the site, and threat to human health and the environment. Where applicable to the site, these investigations shall address the following:

(A) Surface water and sediments. Investigations of surface water and sediments to characterize significant hydrologic features such as: Surface drainage patterns and quantities, areas of erosion and sediment deposition, surface waters, floodplains, and actual or potential hazardous substance migration routes towards and within these features. Sufficient surface water and sediment sampling shall be performed to adequately characterize the areal and vertical distribution and concentrations of hazardous substances. Properties of surface and subsurface sediments that are likely to influence the type and rate of hazardous substance migration, or are likely to affect the ability to implement alternative cleanup actions shall be characterized.

(B) Soils. Investigations to adequately characterize the areal and vertical distribution and concentrations of hazardous substances in the soil due to the release. Properties of surface and subsurface soils that are likely to influence the type and rate of hazardous substance migration, or which are likely to affect the ability to implement alternative cleanup actions shall be characterized.

(C) Geology and ground water system characteristics. Investigations of site geology and hydrogeology to adequately characterize the areal and vertical distribution and concentrations of hazardous substances in the ground water and those features which affect the fate and transport of these hazardous substances. This shall include, as appropriate, the description, physical properties and distribution of bedrock and unconsolidated materials; ground water flow rate and gradient for affected and potentially affected ground waters; ground water divides; areas of ground water recharge and discharge; location of public and private production wells; and ground water quality data.

(D) Air. An evaluation of air quality impacts, including sampling, where appropriate, and information regarding local and regional climatological characteristics which are likely to affect the hazardous substance migration such as seasonal patterns of rainfall, the magnitude and frequency of significant storm events, temperature extremes, prevailing wind direction, variations in barometric pressure, and wind velocity.

(E) Land use. Information regarding present and proposed land and resource uses and zoning for the site and potentially affected areas and information characterizing human and ecological populations that are reasonably likely to be exposed or potentially exposed to the release based on such use.

(F) Natural resources and ecological receptors.

(I) Information to determine the impact or potential impact of the hazardous substance from the facility on natural resources and ecological receptors, including any information needed to conduct a terrestrial ecological evaluation, under WAC 173-340-7492 or 173-340-7493, or to establish an exclusion under WAC 173-340-7491.

(II) Where appropriate, a terrestrial ecological evaluation may be conducted so as to avoid duplicative studies of soil contamination that will be remediated to address other concerns, such as protection of human health. This may be accomplished by evaluating residual threats to the environment after cleanup action alternatives for human health protection have been developed. If this approach is used, the remedial investigation may be phased. Examples of sites where this approach may not be appropriate include: A site contaminated with a hazardous substance that is primarily an ecological concern and will not obviously be addressed by the cleanup action for the protection of human health, such as zinc; or a site where the development of a human health based remedy is expected to be a lengthy process, and postponing the terrestrial ecological evaluation would cause further harm to the environment.

(III) If it is determined that a simplified or site-specific terrestrial ecological evaluation is not required under WAC 173-340-7491, the basis for this determination shall be included in the remedial investigation report.

(G) Hazardous substance sources. A description of and sufficient sampling to define the location, quantity, areal and vertical extent, concentration within and sources of releases. Where relevant, information on the physical and chemical characteristics, and the biological effects of hazardous substances shall be provided.

(H) Regulatory classifications. Regulatory designations classifying affected air, surface water and ground water, if any.

(iv) Workplans. A safety and health plan and a sampling and analysis plan shall be prepared as part of the remedial investigation/feasibility study. These plans shall conform to the requirements specified in WAC 173-340-810 and 173-340-820.

(v) Other information. Other information may be required by the department.

(8) Procedures for conducting a feasibility study.

(a) Purpose. The purpose of the feasibility study is to develop and evaluate cleanup action alternatives to enable a cleanup action to be selected for the site. If concentrations of hazardous substances do not exceed the cleanup level at a standard point of compliance, no further action is necessary.

(b) Screening of alternatives. An initial screening of alternatives to reduce the number of alternatives for the final detailed evaluation may be appropriate. The person conducting the feasibility study may initially propose cleanup action alternatives or components to be screened from detailed evaluation. The department shall make the final determination of which alternatives must be evaluated in the feasibility study. The following cleanup action alternatives or components may be eliminated from the feasibility study:

(i) Alternatives that, based on a preliminary analysis, the department determines so clearly do not meet the minimum requirements specified in WAC 173-340-360 that a more detailed analysis is unnecessary. This includes those alternatives for which costs are clearly disproportionate under WAC 173-340-360 (3)(e); and

(ii) Alternatives or components that are not technically possible at the site.

(c) Content. A feasibility study shall include the following information as appropriate.

(i) General requirements.

(A) The feasibility study shall include cleanup action alternatives that protect human health and the environment (including, as appropriate, aquatic and terrestrial ecological receptors) by eliminating, reducing, or otherwise controlling risks posed through each exposure pathway and migration route.

(B) A reasonable number and type of alternatives shall be evaluated, taking into account the characteristics and complexity of the facility, including current site conditions and physical constraints.

(C) Each alternative may consist of one or more cleanup action components, including, but not limited to, components that reuse or recycle the hazardous substances, destroy or detoxify the hazardous substances, immobilize or solidify the hazardous substances, provide for on-site or off-site disposal of the hazardous substances in an engineered, lined and monitored facility, on-site isolation or containment of the hazardous substances with attendant engineering controls, and institutional controls and monitoring.

(D) Alternatives may, as appropriate, include remediation levels to define when particular cleanup action components will be used. Alternatives may also include different remediation levels for the same component. For example, alternatives that excavate and treat soils at varying concentrations may be appropriate to evaluate. See WAC 173-340-355 for detailed information on establishing potential remediation levels to be evaluated in the feasibility study.

(E) If necessary, evaluate the residual threats that would accompany each alternative and determine if remedies that are protective of human health will also be protective of ecological receptors. See subsection (7)(c)(iii)(F) of this section.

(F) The feasibility study shall include alternatives with the standard point of compliance for each environmental media containing hazardous substances, unless those alternatives have been eliminated under (b) of this subsection, and may include, as appropriate, alternatives with conditional points of compliance.

(G) Each alternative shall be evaluated on the basis of the requirements and the criteria specified in WAC 173-340-360.

(H) A preferred cleanup action may be identified in the feasibility study, where appropriate.

(I) Other information may be required by the department.

(ii) Permanent alternatives.

(A) Except as provided in (c)(ii)(B) of this subsection, the feasibility study shall include at least one permanent cleanup action alternative, as defined in WAC 173-340-200, to serve as a baseline against which other alternatives shall be evaluated for the purpose of determining whether the cleanup action selected is permanent to the maximum extent practicable. The most practicable permanent cleanup action alternative shall be included.

(B) The feasibility study does not need to include a permanent cleanup action alternative under any of the following circumstances:

(I) Where a model remedy is the selected cleanup action;

(II) Where a permanent cleanup action alternative is not technically possible; or

(III) Where the cost of the most practicable permanent cleanup action alternative is so clearly disproportionate that a more detailed analysis is not necessary, as determined through the screening process in (b)(i) of this subsection.

(9) Additional requirements.

(a) Cleanup levels. Unless otherwise specified under this chapter, cleanup levels shall be established for hazardous substances in each medium and for each pathway where a release has occurred, using WAC 173-340-700 through 173-340-760. These are typically initially established during the scoping of the remedial investigation and may be further refined during the remedial investigation and/or feasibility study.

(b) Compliance with other laws. The department may require that a remedial investigation/feasibility study include additional information or analyses to comply with the State Environmental Policy Act or other applicable laws. This includes information necessary to make a threshold determination (see WAC 197-11-335(1)), or information necessary to integrate the remedial investigation/feasibility study with an environmental impact statement (see WAC 197-11-262).

(c) Treatability studies. The department may require treatability studies as necessary to provide sufficient information to develop and evaluate cleanup action alternatives for a site.

(d) Other information. Other information may be required by the department.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-350, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-350, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-350, filed 4/3/90, effective 5/4/90.]

WAC 173-340-355 Development of cleanup action alternatives that include remediation levels. (1) Purpose. A cleanup action selected for a site will often involve a combination of cleanup action components, such as treatment of some soil contamination and containment of the remainder. Remediation levels are used to identify the concentrations (or other methods of identification) of hazardous substances at which different cleanup action components will be used. (See the definition of remediation level in WAC 173-340-200.) Remediation levels may be used at sites where a combination of cleanup actions components are used to achieve cleanup levels at the point of compliance (see the examples in subsection (3)(a) and (c) of this section). Remediation levels may also be used at sites where the cleanup action involves the containment of soils as provided under WAC 173-340-740 (6)(f) and at sites conducting interim actions (see the examples in subsection (3)(b) and (d) of this section).

(2) Relationship to cleanup levels and cleanup standards. Remediation levels are not the same as cleanup levels. A cleanup level defines the concentration of hazardous substances above which a contaminated medium (e.g., soil) must be remediated in some manner (e.g., treatment, containment, institutional controls). A remediation level, on the other hand, defines the concentration (or other method of identification) of a hazardous substance in a particular medium above or below which a particular cleanup action component (e.g., soil treatment or containment) will be used. Remediation levels, by definition, exceed cleanup levels.

Cleanup levels must be established for every site. Remediation levels, on the other hand, may not be necessary at a site. Whether remediation levels are necessary depends on the cleanup action selected. For example, remediation levels would not be necessary if the selected cleanup action removes for off-site disposal all soil that exceeds the cleanup level at the applicable points of compliance.

A cleanup action that uses remediation levels must meet each of the minimum requirements specified in WAC 173-340-360, including the requirement that all cleanup actions must comply with cleanup standards. Compliance with cleanup standards requires, in part, that cleanup levels are met at the applicable points of compliance. If the remedial action does not comply with cleanup standards, the remedial action is an interim action, not a cleanup action. Where a cleanup action involves containment of soils with hazardous substance concentrations exceeding cleanup levels at the point of compliance, the cleanup action may be determined to comply with cleanup standards, provided the requirements specified in WAC 173-340-740 (6)(f) are met.

(3) Examples. The following examples of cleanup actions that use remediation levels are for illustrative purposes only. All cleanup action alternatives in a feasibility study, including those with proposed remediation levels, must be evaluated to determine whether they meet each of the minimum requirements specified in WAC 173-340-360 (see WAC 173-340-360 (2)(h)). This evaluation requires, in part, a determination that a more permanent cleanup action is not practicable, based on the disproportionate cost analysis in WAC 173-340-360 (3)(e).

(a) Example of a site meeting soil cleanup levels at the point of compliance. Assume that the soil cleanup level at a site is 20 ppm. Further assume that the cleanup action alternative determined to comply with the minimum requirements in WAC 173-340-360 and selected for the site consists of soil treatment and removal and a remediation level of 100 ppm to define when those two components are used. Under the cleanup standard, any soil that exceeds the 20 ppm cleanup level at the applicable point of compliance must be remediated in some manner. Under the selected cleanup action, any soil that exceeds the 100 ppm remediation level must be removed and treated. Any soil that does not exceed the 100 ppm remediation level, but exceeds the 20 ppm cleanup level, must be removed and landfilled. The cleanup action may be determined to comply with the cleanup standard because the cleanup level is met at the applicable point of compliance.

(b) Example of a site not meeting soil cleanup levels at the point of compliance. Assume that the soil cleanup level at a site is 20 ppm. Further assume that the cleanup action alternative determined to comply with the minimum requirements in WAC 173-340-360 and selected for the site consists of soil treatment and containment and a remediation level of 100 ppm to define when those two components are used. Under the cleanup standard, any soil that exceeds the 20 ppm cleanup level at the applicable point of compliance must be remediated in some manner. Under the selected cleanup action, any soil that exceeds the 100 ppm remediation level must be treated. Any soil that does not exceed the 100 ppm remediation level, but exceeds the 20 ppm cleanup level, must be contained. Residual contamination above the cleanup level will remain at the site. However, assuming the cleanup action meets the requirements specified in WAC 173-340-740 (6)(f) for soil containment actions, the cleanup action may be determined to comply with cleanup standards.

(c) Example of site meeting ground water cleanup levels at the point of compliance. Assume that the ground water cleanup level at a site is 500 ug/l and that a conditional point of compliance is established at the property boundary. Further assume that the cleanup action alternative determined to comply with the minimum requirements in WAC 173-340-360 and selected for the site consists of: Removing the source of the ground water contamination (e.g., removal of a leaking tank and associated soil contamination above the water table); extracting free product and any ground water exceeding a concentration of 2,000 ug/l; and utilizing natural attenuation to restore the ground water to 500 ug/l before it arrives at the property boundary. The ground water concentration of 2,000 ug/l constitutes a remediation level because it defines the concentration of a hazardous substance at which different cleanup action components are used. As long as the ground water meets the 500 ug/l cleanup level at the conditional point of compliance (the property boundary), the cleanup action may be determined to comply with cleanup standards.

(d) Example of a site not meeting ground water cleanup levels at the point of compliance. Assume that the ground water cleanup level at a site is 5 ug/l and that a conditional point of compliance is established at the property boundary. Further assume that the remedial action selected for the site consists of: Vapor extraction of the soil to nondetectable concentrations (to prevent further ground water contamination); extraction and treatment of ground water with concentrations in excess of 100 ug/l; and installation of an air stripping system to treat ground water at a water supply well beyond the property boundary to less than 5 ug/l. Further assume that the ground water cleanup level will not be met at the conditional point of compliance (the property boundary). The ground water concentration of 100 ug/l constitutes a remediation level because it defines the concentration of a hazardous substance at which different cleanup action components are used. However, in this example, the remedial action does not constitute a cleanup action because it does not comply with cleanup standards, one of the minimum requirements for cleanup actions in WAC 173-340-360. Consequently, the remedial action is considered an interim action until the cleanup level is attained at the conditional point of compliance (the property boundary).

(4) General requirements. Potential remediation levels may be developed as part of the cleanup action alternatives to be considered during the feasibility study (see WAC 173-340-350 (8)(c)(i)(D)). These potential remediation levels may be defined as either a concentration or other method of identification of a hazardous substance. Other methods of identification include physical appearance or location (e.g., all of the green sludge will be removed from the northern area of the site). Quantitative or qualitative methods may be used to develop these potential remediation levels. These methods may include a human health risk assessment or an ecological risk assessment. These methods may also consider fate and transport issues. These methods may be simple or complex,

as appropriate to the site. Where a quantitative risk assessment is used, see WAC 173-340-357. All cleanup action alternatives in a feasibility study, including those with proposed remediation levels, must still be evaluated to determine whether they meet each of the minimum requirements specified in WAC 173-340-360 (see WAC 173-340-360 (2)(h)).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-355, filed 2/12/01, effective 8/15/01.]

WAC 173-340-357 Quantitative risk assessment of cleanup action alternatives. (1) Purpose. A quantitative site-specific risk assessment may be conducted to help determine whether cleanup action alternatives, including those using a remediation level, engineered control and/or institutional control, are protective of human health and the environment. If a quantitative site-specific risk assessment is used, then other considerations may also be needed in evaluating the protectiveness of the overall cleanup action. Methods other than a quantitative site-specific risk assessment may also be used to determine if a cleanup action alternative is protective of human health and the environment.

(2) Relationship to selection of cleanup actions. Selecting a cleanup action requires a determination that each of the requirements specified in WAC 173-340-360 is met, including the requirement that the cleanup action is protective of human health and the environment. A quantitative risk assessment conducted under this section may be used to help determine whether a particular cleanup action alternative meets this requirement. A determination that a cleanup action alternative evaluated is protective of human health and the environment does not mean that the other minimum requirements specified in WAC 173-340-360 have been met.

(3) Protection of human health. A quantitative site-specific human health risk assessment may be conducted to help determine whether cleanup action alternatives, including those using a remediation level, engineered control and/or institutional control, are protective of human health. For the purpose of this assessment, the default assumptions in the standard Method B and C equations in WAC 173-340-720 through 173-340-750 may be modified as provided for under modified Method B and C. In addition to those modifications, adjustments to the reasonable maximum exposure scenario or default exposure assumptions may also be made. See WAC 173-340-708 (3)(d) and (10)(b). References to Method C in this subsection apply to a medium only if the particular medium the remediation level is being established for qualifies for a Method C cleanup level under WAC 173-340-706.

(a) Reasonable maximum exposure. Standard reasonable maximum exposures and corresponding Method B and C equations in WAC 173-340-720 through 173-340-750 may be modified as provided under WAC 173-340-708 (3)(d). For example, land uses other than residential and industrial may be used as the basis for an alternative reasonable maximum exposure scenario for the purpose of assessing the protectiveness of a cleanup action alternative that uses a remediation level, engineered control, and/or institutional control.

(b) Exposure parameters. Exposure parameters for the standard Method B and C equations in WAC 173-340-720 through 173-340-750 may be modified as provided in WAC 173-340-708(10).

(c) Acceptable risk level. The acceptable risk level for remediation levels shall be the same as that used for the cleanup level.

(d) Soil to ground water pathway. The methods specified in WAC 173-340-747 to develop soil concentrations that are protective of ground water beneficial uses may also be used during remedy selection to help assess the protectiveness to human health of a cleanup action alternative that uses a remediation level, engineered control, and/or institutional control.

(e) Burden of proof, new science, and quality of information. Any modification of the default assumptions in the standard Method B and C equations, including modification of the standard reasonable maximum exposures and exposure parameters, or any modification of default assumptions or methods specified in WAC 173-340-747 requires compliance with WAC 173-340-702 (14), (15) and (16).

(f) Commercial gas station scenario.

(i) At active commercial gas stations, where there are retail sales of gasoline and/or diesel, Equations 740-3 and 740-5 may be used with the exposure frequency reduced to 0.25 to demonstrate when a cap is protective of the soil ingestion and dermal pathways. This scenario is intended to be a conservative estimate of a child trespasser scenario at a commercial gas station where contaminated soil has been excavated and stockpiled or soil is otherwise accessible. Sites using remediation levels must also use institutional controls to prevent uses that could result in a higher level of exposure and assess the protectiveness for other exposure pathways (e.g., soil vapors and soil to ground water).

(ii) Equations 740-3 and 740-5 may also be modified on a site-specific basis as described in WAC 173-340-740 (3)(c).

(4) Protection of the environment. A quantitative site-specific ecological risk assessment may be conducted to help determine whether cleanup action alternatives, including those using a remediation level, engineered control and/or institutional control, are protective of the environment.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-357, filed 2/12/01, effective 8/15/01.]

WAC 173-340-360 Selection of cleanup actions. (1) Purpose.

This section describes the minimum requirements and procedures for selecting cleanup actions. This section is intended to be used in conjunction with the administrative principles for the overall cleanup process in WAC 173-340-130; the requirements and procedures in WAC 173-340-350 through 173-340-357 and WAC 173-340-370 through 173-340-390; and the cleanup standards defined in WAC 173-340-700 through 173-340-760.

(2) Minimum requirements for cleanup actions. All cleanup actions shall meet the following requirements. Because cleanup actions will often involve the use of several cleanup action components at a single site, the overall cleanup action shall meet the requirements of this section. The department recognizes that some of the requirements contain flexibility and will require the use of professional judgment in determining how to apply them at particular sites.

(a) Threshold requirements. The cleanup action shall:

(i) Protect human health and the environment;

(ii) Comply with cleanup standards (see WAC 173-340-700 through 173-340-760);

(iii) Comply with applicable state and federal laws (see WAC 173-340-710); and

(iv) Provide for compliance monitoring (see WAC 173-340-410 and 173-340-720 through 173-340-760).

(b) Other requirements. When selecting from cleanup action alternatives that fulfill the threshold requirements, the selected action shall:

(i) Use permanent solutions to the maximum extent practicable (see subsection (3) of this section);

(ii) Provide for a reasonable restoration time frame (see subsection (4) of this section); and

(iii) Consider public concerns (see WAC 173-340-600).

(c) Ground water cleanup actions.

(i) Permanent ground water cleanup actions. A permanent cleanup action shall be used to achieve the cleanup levels for ground water in WAC 173-340-720 at the standard point(s) of compliance (see WAC 173-340-720(8)) where a permanent cleanup action is practicable or determined by the department to be in the public interest.

(ii) Nonpermanent ground water cleanup actions. Where a permanent cleanup action is not required under (c)(i) of this subsection, the following measures shall be taken:

(A) Treatment or removal of the source of the release shall be conducted for liquid wastes, areas contaminated with high concentrations of hazardous substances, highly mobile hazardous substances, or hazardous substances that cannot be reliably contained. This includes removal free product consisting of petroleum and other light nonaqueous phase liquid (LNAPL) from the ground water using normally accepted engineering practices. Source containment may be appropriate when the free product consists of a dense nonaqueous phase liquid (DNAPL) that cannot be recovered after reasonable efforts have been made.

(B) Ground water containment, including barriers or hydraulic control through ground water pumping, or both, shall be implemented to the maximum extent practicable to avoid lateral and vertical expansion of the ground water volume affected by the hazardous substance.

(d) Cleanup actions for soils at current or potential future residential areas and for soils at schools and child care centers. For current or potential future residential areas and for schools and child care centers, soils with hazardous substance concentrations that exceed soil cleanup levels must be treated, removed, or contained. Property qualifies as a current or potential residential area if:

(i) The property is currently used for residential use; or

(ii) The property has a potential to serve as a future residential area based on the consideration of zoning, statutory and regulatory restrictions, comprehensive plans, historical use, adjacent land uses, and other relevant factors.

(e) Institutional controls.

(i) Cleanup actions shall use institutional controls and financial assurances when required under WAC 173-340-440.

(ii) Cleanup actions that use institutional controls shall meet each of the minimum requirements specified in this section, just as any other cleanup action. Institutional controls should demonstrably reduce risks to ensure a protective remedy. This demonstration should be based on a quantitative scientific analysis where appropriate.

(iii) In addition to meeting each of the minimum requirements specified in this section, cleanup actions shall not rely primarily on institutional controls and monitoring where it is technically possible to implement a more permanent cleanup action for all or a portion of the site.

(f) Releases and migration. Cleanup actions shall prevent or minimize present and future releases and migration of hazardous substances in the environment.

(g) Dilution and dispersion. Cleanup actions shall not rely primarily on dilution and dispersion unless the incremental costs of any active remedial measures over the costs of dilution and dispersion grossly exceed the incremental degree of benefits of active remedial measures over the benefits of dilution and dispersion.

(h) Remediation levels. Cleanup actions that use remediation levels shall meet each of the minimum requirements specified in this section, just as any other cleanup action.

(i) Selection of a cleanup action alternative that uses remediation levels requires, in part, a determination that a more permanent cleanup action is not practicable, based on the disproportionate cost analysis (see subsections (2)(b)(i) and (3) of this section).

(ii) Selection of a cleanup action alternative that uses remediation levels also requires a determination that the alternative meets each of the other minimum requirements specified in this section, including a determination that the alternative is protective of human health and the environment.

(3) Determining whether a cleanup action uses permanent solutions to the maximum extent practicable.

(a) Purpose. This subsection describes the requirements and procedures for determining whether a cleanup action uses permanent solutions to the maximum extent practicable, as required under subsection (2)(b)(i) of this section. A determination that a cleanup action meets this one requirement does not mean that the other minimum requirements specified in subsection (2) of this section have been met. To select a cleanup action for a site, a cleanup action must meet each of the minimum requirements specified in subsection (2) of this section.

(b) General requirements. When selecting a cleanup action, preference shall be given to permanent solutions to the maximum extent practicable. To determine whether a cleanup action uses permanent solutions to the maximum extent practicable, the disproportionate cost analysis specified in (e) of this subsection shall be used. The analysis shall compare the costs and benefits of the cleanup action alternatives evaluated in the feasibility study. The costs and benefits to be compared are the evaluation criteria identified in (f) of this subsection.

(c) Permanent cleanup action defined. A permanent cleanup action or permanent solution is defined in WAC 173-340-200.

(d) Selection of a permanent cleanup action. A disproportionate cost analysis shall not be required if the department and the potentially liable persons agree to a permanent cleanup action that will be identified by the department as the proposed cleanup action in the draft cleanup action plan.

(e) Disproportionate cost analysis.

(i) Test. Costs are disproportionate to benefits if the incremental costs of the alternative over that of a lower cost alternative exceed the incremental degree of benefits achieved by the alternative over that of the other lower cost alternative.

(ii) Procedure.

(A) The alternatives evaluated in the feasibility study shall be ranked from most to least permanent, based on the evaluation of the alternatives under (f) of this subsection and the definition of permanent solution in (c) of this subsection.

(B) The most practicable permanent solution evaluated in the feasibility study shall be the baseline cleanup action alternative against which cleanup action alternatives are compared. If no permanent solution has been evaluated in the feasibility study, the cleanup action alternative evaluated in the feasibility study that provides the greatest degree of permanence shall be the baseline cleanup action alternative.

(C) The comparison of benefits and costs may be quantitative, but will often be qualitative and require the use of best professional judgment. In particular, the department has the discretion to favor or disfavor qualitative benefits and use that information in selecting a cleanup action. Where two or more alternatives are equal in benefits, the department shall select the less costly alternative provided the requirements of subsection (2) of this section are met.

(f) Evaluation criteria. The following criteria shall be used to evaluate and compare each cleanup action alternative when conducting a disproportionate cost analysis under (e) of this subsection to determine whether a cleanup action is permanent to the maximum extent practicable.

(i) Protectiveness. Overall protectiveness of human health and the environment, including the degree to which existing risks are reduced, time required to reduce risk at the facility and attain cleanup standards, on-site and off-site risks resulting from implementing the alternative, and improvement of the overall environmental quality.

(ii) Permanence. The degree to which the alternative permanently reduces the toxicity, mobility or volume of hazardous substances, including the adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and sources of releases, the degree of irreversibility of waste treatment process, and the characteristics and quantity of treatment residuals generated.

(iii) Cost. The cost to implement the alternative, including the cost of construction, the net present value of any long-term costs, and agency oversight costs that are cost recoverable. Long-term costs include operation and maintenance costs, monitoring costs, equipment replacement costs, and the cost of maintaining institutional controls. Cost estimates for treatment technologies shall describe pretreatment, analytical, labor, and waste management costs. The design life of the cleanup action shall be estimated and the cost of replacement or repair of major elements shall be included in the cost estimate.

(iv) Effectiveness over the long term. Long-term effectiveness includes the degree of certainty that the alternative will be successful, the reliability of the alternative during the period of time hazardous substances are expected to remain on-site at concentrations that exceed cleanup levels, the magnitude of residual risk with the alternative in place, and the effectiveness of controls required to manage treatment residues or remaining wastes. The following types of cleanup action components may be used as a guide, in descending order, when assessing the relative degree of long-term effectiveness: Reuse or recycling; destruction or detoxification; immobilization or solidification; on-site or off-site disposal in an engineered, lined and monitored facility; on-site isolation or containment with attendant engineering controls; and institutional controls and monitoring.

(v) Management of short-term risks. The risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that will be taken to manage such risks.

(vi) Technical and administrative implementability. Ability to be implemented including consideration of whether the alternative is technically possible, availability of necessary off-site facilities, services and materials, administrative and regulatory requirements, scheduling, size, complexity, monitoring requirements, access for construction operations and monitoring, and integration with existing facility operations and other current or potential remedial actions.

(vii) Consideration of public concerns. Whether the community has concerns regarding the alternative and, if so, the extent to which the alternative addresses those concerns. This process includes concerns from individuals, community groups, local governments, tribes, federal and state agencies, or any other organization that may have an interest in or knowledge of the site.

(4) Determining whether a cleanup action provides for a reasonable restoration time frame.

(a) Purpose. This subsection describes the requirements and procedures for determining whether a cleanup action provides for a reasonable restoration time frame, as required under subsection (2)(b)(ii) of this section. A determination that a cleanup action meets this one requirement does not mean that the other minimum requirements specified in subsection (2) of this section have been met. To select a cleanup action for a site, a cleanup action must meet each of the minimum requirements specified in subsection (2) of this section.

(b) Factors. To determine whether a cleanup action provides for a reasonable restoration time frame, the factors to be considered include the following:

(i) Potential risks posed by the site to human health and the environment;

(ii) Practicability of achieving a shorter restoration time frame;

(iii) Current use of the site, surrounding areas, and associated resources that are, or may be, affected by releases from the site;

(iv) Potential future use of the site, surrounding areas, and associated resources that are, or may be, affected by releases from the site;

(v) Availability of alternative water supplies;

(vi) Likely effectiveness and reliability of institutional controls;

(vii) Ability to control and monitor migration of hazardous substances from the site;

(viii) Toxicity of the hazardous substances at the site; and

(ix) Natural processes that reduce concentrations of hazardous substances and have been documented to occur at the site or under similar site conditions.

(c) A longer period of time may be used for the restoration time frame for a site to achieve cleanup levels at the point of compliance if the cleanup action selected has a greater degree of long-term effectiveness than on-site or off-site disposal, isolation, or containment options.

(d) When area background concentrations (see WAC 173-340-200 for definition) would result in recontamination of the site to levels that exceed cleanup levels, that portion of the cleanup action which addresses cleanup below area background concentrations may be delayed until the off-site sources of hazardous substances are controlled. In these cases the remedial action shall be considered an interim action until cleanup levels are attained.

(e) Where cleanup levels determined under Method C in WAC 173-340-706 are below technically possible concentrations, concentrations that are technically possible to achieve shall be met within a reasonable time frame considering the factors in subsection (b) of this section. In these cases the remedial action shall be considered an interim action until cleanup levels are attained.

(f) Extending the restoration time frame shall not be used as a substitute for active remedial measures, when such actions are practicable.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-360, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-360, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-360, filed 4/3/90, effective 5/4/90.]

WAC 173-340-370 Expectations for cleanup action alternatives. The department has the following expectations for the development of cleanup action alternatives under WAC 173-340-350 and the selection of cleanup actions under WAC 173-340-360. These expectations represent the types of cleanup actions the department considers likely results of the remedy selection process described in WAC 173-340-350 through 173-340-360; however, the department recognizes that there may be some sites where cleanup actions conforming to these expectations are not appropriate. Also, selecting a cleanup action that meets these expectations shall not be used as a substitute for selecting a cleanup action under the remedy selection process described in WAC 173-340-350 through 173-340-360.

(1) The department expects that treatment technologies will be emphasized at sites containing liquid wastes, areas contaminated with high concentrations of hazardous substances, highly mobile materials, and/or discrete areas of hazardous substances that lend themselves to treatment.

(2) To minimize the need for long-term management of contaminated materials, the department expects that all hazardous substances will be destroyed, detoxified, and/or removed to concentrations below cleanup levels throughout sites containing small volumes of hazardous substances.

(3) The department recognizes the need to use engineering controls, such as containment, for sites or portions of sites that contain large volumes of materials with relatively low levels of hazardous substances where treatment is impracticable.

(4) In order to minimize the potential for migration of hazardous substances, the department expects that active measures will be taken to prevent precipitation and subsequent runoff from coming into contact with contaminated soils and waste materials. When such measures are impracticable, such as during active cleanup, the department expects that site runoff will be contained and treated prior to release from the site.

(5) The department expects that when hazardous substances remain on-site at concentrations which exceed cleanup levels, those hazardous substances will be consolidated to the maximum extent practicable where needed to minimize the potential for direct contact and migration of hazardous substances;

(6) The department expects that, for facilities adjacent to a surface water body, active measures will be taken to prevent/minimize releases to surface water via surface runoff and ground water discharges in excess of cleanup levels. The department expects that dilution will not be the sole method for demonstrating compliance with cleanup standards in these instances.

(7) The department expects that natural attenuation of hazardous substances may be appropriate at sites where:

(a) Source control (including removal and/or treatment of hazardous substances) has been conducted to the maximum extent practicable;

(b) Leaving contaminants on-site during the restoration time frame does not pose an unacceptable threat to human health or the environment;

(c) There is evidence that natural biodegradation or chemical degradation is occurring and will continue to occur at a reasonable rate at the site; and

(d) Appropriate monitoring requirements are conducted to ensure that the natural attenuation process is taking place and that human health and the environment are protected.

(8) The department expects that cleanup actions conducted under this chapter will not result in a significantly greater overall threat to human health and the environment than other alternatives.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-370, filed 2/12/01, effective 8/15/01.]

WAC 173-340-380 Cleanup action plan. (1) **Draft cleanup action plan.** The department shall issue a draft cleanup action plan for a cleanup action to be conducted by the department or by a potentially liable person under an order or decree. The level of detail in the draft cleanup action plan shall be commensurate with the complexity of the site and proposed cleanup action.

(a) The draft cleanup action plan shall include the following:

(i) A general description of the proposed cleanup action developed in accordance with WAC 173-340-350 through 173-340-390.

(ii) A summary of the rationale for selecting the proposed alternative.

(iii) A brief summary of other cleanup action alternatives evaluated in the remedial investigation/feasibility study.

(iv) Cleanup standards and, where applicable, remediation levels, for each hazardous substance and for each medium of concern at the site.

(v) The schedule for implementation of the cleanup action plan including, if known, restoration time frame.

(vi) Institutional controls, if any, required as part of the proposed cleanup action.

(vii) Applicable state and federal laws, if any, for the proposed cleanup action, when these are known at this step in the cleanup process (this does not preclude subsequent identification of applicable state and federal laws).

(viii) A preliminary determination by the department that the proposed cleanup action will comply with WAC 173-340-360.

(ix) Where the cleanup action involves on-site containment, specification of the types, levels, and amounts of hazardous substances remaining on site and the measures that will be used to prevent migration and contact with those substances.

(b) For routine actions the department may use an order or decree to fulfill the requirements of a cleanup action plan, provided that the information in (a) of this subsection is included in an order or decree. The scope of detail for the required information shall be commensurate with the complexity of the site and proposed cleanup action.

(2) **Public participation.** The department will provide public notice and opportunity for comment on the draft cleanup plan, as required in WAC 173-340-600(13).

(3) **Final cleanup action plan.** After review and consideration of the comments received during the public comment period, the department shall issue a final cleanup action plan and publish its availability in the *Site Register* and by other appropriate methods. If the department determines, following the implementation of the preferred alternative, that the cleanup standards or, where applicable, remediation levels established in the cleanup action plan cannot be achieved, the department shall issue public notice of this determination.

(4) **Federal cleanup sites.** For federal cleanup sites, a record of decision or order or consent decree prepared under the federal cleanup law may be used by the department to meet the requirements of this section provided:

(a) The cleanup action meets the requirements under WAC 173-340-360;

(b) The state has concurred with the cleanup action; and

(c) An opportunity was provided for the public to comment on the cleanup action.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-380, filed 2/12/01, effective 8/15/01.]

WAC 173-340-390 Model remedies. (1) **Purpose.** The purpose of model remedies is to streamline and accelerate the selection of cleanup actions that protect human health and the environment, with a preference for permanent solutions to the maximum extent practicable.

(2) **Development of model remedies.** The department may, from time to time, identify model remedies for common categories of facilities, types of contamination, types of media, and geographic areas. In identifying a model remedy, the department shall identify the circumstances for which application of the model remedy meets the requirements under WAC 173-340-360. The department shall provide an opportunity for the public to review and comment on any proposed model remedies.

(3) **Applicability and effect of model remedies.** Where a site meets the circumstances identified by the department under subsection (2) of this section, the components of the model remedy may be selected as the cleanup action, or as a portion of the cleanup action. At such sites, it shall not be necessary to conduct a feasibility study under WAC 173-340-350(8) or a disproportionate cost analysis under WAC 173-340-360(3) for those components of a cleanup action to which a model remedy applies.

(4) **Public notice and participation.** Where a model remedy is proposed as the cleanup action or as a portion of the cleanup action, the cleanup action plan is still subject to the same public notice and participation requirements in this chapter as any other cleanup action.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-390, filed 2/12/01, effective 8/15/01.]

PART IV—SITE CLEANUP AND MONITORING

WAC 173-340-400 Implementation of the cleanup action. (1) Purpose. Unless otherwise directed by the department, cleanup actions shall comply with this section except for emergencies or interim actions. The purpose of this section is to ensure that the cleanup action is designed, constructed, and operated in a manner that is consistent with:

(a) The cleanup action plan;

(b) Accepted engineering practices; and

(c) The requirements specified in WAC 173-340-360.

(2) Administrative options. A cleanup action may be conducted under any of the procedures described in WAC 173-340-510 and 173-340-515.

(3) Public participation. During cleanup action implementation, public participation shall be accomplished in a manner consistent with the requirements of WAC 173-340-600.

(4) Plans describing the cleanup action. Design, construction, and operation of the cleanup action shall be consistent with the purposes of this section and shall consider relevant information provided by the remedial investigation/feasibility study. For most cleanups, to ensure this is done it will be necessary to prepare the engineering documents described in this section. The scope and level of detail in these documents may vary from site to site depending on the site-specific conditions and nature and complexity of the proposed cleanup action. In many cases, such as routine cleanups and cleanups at leaking underground storage tanks, it is appropriate to combine the information in these various documents into one report to avoid unnecessary duplication. Where the information is contained in other documents it may be appropriate to incorporate those documents by reference to avoid duplication. Any document prepared in order to implement a cleanup may be used to satisfy these requirements provided they contain the required information. In addition, for facilities on the national priorities list the plans prepared for the cleanup action shall also comply with federal requirements.

(a) Engineering design report. The engineering design report shall include sufficient information for the development and review of construction plans and specifications. It shall document engineering concepts and design criteria used for design of the cleanup action. The following information shall be included in the engineering design report, as appropriate:

(i) Goals of the cleanup action including specific cleanup or performance requirements;

(ii) General information on the facility including a summary of information in the remedial investigation/feasibility study updated as necessary to reflect the current conditions;

(iii) Identification of who will own, operate, and maintain the cleanup action during and following construction;

(iv) Facility maps showing existing site conditions and proposed location of the cleanup action;

(v) Characteristics, quantity, and location of materials to be treated or otherwise managed, including ground water containing hazardous substances;

(vi) A schedule for final design and construction;

(vii) A description and conceptual plan of the actions, treatment units, facilities, and processes required to implement the cleanup action including flow diagrams;

(viii) Engineering justification for design and operation parameters, including:

(A) Design criteria, assumptions and calculations for all components of the cleanup action;

(B) Expected treatment, destruction, immobilization, or containment efficiencies and documentation on how that degree of effectiveness is determined; and

(C) Demonstration that the cleanup action will achieve compliance with cleanup requirements by citing pilot or treatability test data, results from similar operations, or scientific evidence from the literature;

(ix) Design features for control of hazardous materials spills and accidental discharges (for example, containment structures, leak detection devices, run-on and run-off controls);

(x) Design features to assure long-term safety of workers and local residences (for example, hazardous substances monitoring devices, pressure valves, bypass systems, safety cutoffs);

(xi) A discussion of methods for management or disposal of any treatment residual and other waste materials containing hazardous substances generated as a result of the cleanup action;

(xii) Facility specific characteristics that may affect design, construction, or operation of the selected cleanup action, including:

(A) Relationship of the proposed cleanup action to existing facility operations;

(B) Probability of flooding, probability of seismic activity, temperature extremes, local planning and development issues; and

(C) Soil characteristics and ground water system characteristics;

(xiii) A general description of construction testing that will be used to demonstrate adequate quality control;

(xiv) A general description of compliance monitoring that will be performed during and after construction to meet the requirements of WAC 173-340-410;

(xv) A general description of construction procedures proposed to assure that the safety and health requirements of WAC 173-340-810 are met;

(xvi) Any information not provided in the remedial investigation/feasibility study needed to fulfill the applicable requirements of the State Environmental Policy Act (chapter 43.21C RCW);

(xvii) Any additional information needed to address the applicable state, federal and local requirements including the substantive requirements for any exempted permits; and property access issues which need to be resolved to implement the cleanup action;

(xviii) For sites requiring financial assurance and where not already incorporated into the order or decree or other previously submitted document, preliminary cost calculations and financial information describing the basis for the amount and form of financial assurance and, a draft financial assurance document;

(xix) For sites using institutional controls as part of the cleanup action and where not already incorporated into the order or decree or other previously submitted documents, copies of draft restrictive covenants and/or other draft documents establishing these institutional controls; and

(xx) Other information as required by the department.

(b) Construction plans and specifications. Construction plans and specifications shall detail the cleanup actions to be performed. The plans and specifications shall be prepared in conformance with currently accepted engineering practices and techniques and shall include the following information as applicable:

(i) A general description of the work to be performed and a summary of the engineering design criteria from the engineering design report;

(ii) General location map and existing facility conditions map;

(iii) A copy of any permits and approvals;

(iv) Detailed plans, procedures and material specifications necessary for construction of the cleanup action;

(v) Specific quality control tests to be performed to document the construction, including specifications for the testing or reference to specific testing methods, frequency of testing, acceptable results, and other documentation methods;

(vi) Startup procedures and criteria to demonstrate the cleanup action is prepared for routine operation;

(vii) Additional information to address applicable state, federal, and local requirements including the substantive requirements for any exempted permits;

(viii) A compliance monitoring plan prepared under WAC 173-340-410 describing monitoring to be performed during construction, and a sampling and analysis plan meeting the requirements of WAC 173-340-820;

(ix) Provisions to assure safety and health requirements of WAC 173-340-810 are met; and

(x) Other information as required by the department.

(c) Operation and maintenance plan. An operation and maintenance plan that presents technical guidance and regulatory requirements to assure effective operations under both

normal and emergency conditions. The operation and maintenance plan shall include the following elements, as appropriate:

(i) Name and phone number of the responsible individuals;

(ii) Process description and operating principles;

(iii) Design criteria and operating parameters and limits;

(iv) General operating procedures, including startup, normal operations, operation at less than design loading, shutdown, and emergency or contingency procedures;

(v) A discussion of the detailed operation of individual treatment units, including a description of various controls, recommended operating parameters, safety features, and any other relevant information;

(vi) Procedures and sample forms for collection and management of operating and maintenance records;

(vii) Spare part inventory, addresses of suppliers of spare parts, equipment warranties, and appropriate equipment catalogues;

(viii) Equipment maintenance schedules incorporating manufacturers recommendations;

(ix) Contingency procedures for spills, releases, and personnel accidents;

(x) A compliance monitoring plan prepared under WAC 173-340-410 describing monitoring to be performed during operation and maintenance, and a sampling and analysis plan meeting the requirements of WAC 173-340-820;

(xi) Description of procedures which ensure that the safety and health requirements of WAC 173-340-810 are met, including specification of contaminant action levels and contingency plans, as appropriate;

(xii) Procedures for the maintenance of the facility after completion of the cleanup action, including provisions for removal of unneeded appurtenances, and the maintenance of covers, caps, containment structures, and monitoring devices; and

(xiii) Other information as required by the department.

(5) Permits. Permits and approvals and any substantive requirements for exempted permits, if required for construction or to otherwise implement the cleanup action, shall be identified and where possible, resolved before, or during, the design phase to avoid delays during construction and implementation of the cleanup action.

(6) Construction. Construction of the cleanup action shall be conducted in accordance with the construction plans and specifications, and other plans prepared under this section.

(a) Department inspections.

(i) The department may perform site inspections and construction oversight. The department may require that construction activities be halted at a site if construction or any supporting activities are not consistent with approved plans; are not in compliance with environmental regulations or accepted construction procedures; or endanger human health or the environment.

(ii) The department may conduct a formal inspection of the site following construction and an initial operational shake down period to ensure satisfactory completion of the construction. If such an inspection is performed, the construction documentation report and engineer's opinion specified in (b)(ii) of this subsection shall be available before the inspection.

(b) Construction documentation.

(i) Except as provided for in (b)(iii) of this subsection, all aspects of construction shall be performed under the oversight of a professional engineer registered in the state of Washington or a qualified technician under the direct supervision of a professional engineer registered in the state of Washington or as otherwise provided for in RCW 18.43.130. During construction, detailed records shall be kept of all aspects of the work performed including construction techniques and materials used, items installed, and tests and measurements performed.

(ii) As built reports. At the completion of construction the engineer responsible for the oversight of construction shall prepare as built drawings and a report documenting all aspects of facility construction. The report shall also contain an opinion from the engineer, based on testing results and inspections, as to whether the cleanup action has been constructed in substantial compliance with the plans and specifications and related documents.

(iii) For leaking underground storage tanks, the construction oversight and documentation report may be conducted by an underground storage tank provider certified under chapter 173-360 WAC. Removal of above ground abandoned drums, tanks and similar above ground containers and associated minor soil contamination may be overseen and documented by an experienced environmental professional. In other appropriate cases the department may authorize departure from the requirements of this subsection.

(c) Financial assurance and institutional control documentation. As part of the as-built documentation for the site cleanup, where the following information has not already been submitted under an order or decree or as part of another previously submitted document, the following information shall be included in the as-built report:

(i) For sites requiring financial assurance, a copy of the financial assurance document and any procedures for periodic adjustment to the value of the financial assurance mechanism;

(ii) For sites using institutional controls as part of the cleanup action, copies of recorded deed restrictions (with proof of recording) and other documents establishing these institutional controls.

(d) Plan modifications. Changes in the design or construction of the cleanup action performed under an order or decree shall be approved by the department.

(7) Opportunity for public comment. If the department determines that any plans prepared under this section represent a substantial change from the cleanup action plan, the department shall provide public notice and opportunity for comment under WAC 173-340-600.

(8) Plans and reports. Plans or reports prepared under this section and under an order or decree shall be submitted to the department for review and approval. For independent remedial actions, the plans and reports shall be submitted as required under WAC 173-340-515.

(9) Requirements for managing waste generated by site cleanup. Any waste contaminated by a hazardous substance generated during cleanup activities and requiring off-site

treatment, storage or disposal, shall be transported to a facility permitted or approved to handle these wastes.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-400, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-400, filed 4/3/90, effective 5/4/90.]

WAC 173-340-410 Compliance monitoring requirements. (1) Purpose. There are three types of compliance monitoring: Protection, performance, and confirmational monitoring. The purposes of these three types of compliance monitoring and evaluation of the data are to:

(a) Protection monitoring. Confirm that human health and the environment are adequately protected during construction and the operation and maintenance period of an interim action or cleanup action as described in the safety and health plan;

(b) Performance monitoring. Confirm that the interim action or cleanup action has attained cleanup standards and, if appropriate, remediation levels or other performance standards such as construction quality control measurements or monitoring necessary to demonstrate compliance with a permit or, where a permit exemption applies, the substantive requirements of other laws;

(c) Confirmational monitoring. Confirm the long-term effectiveness of the interim action or cleanup action once cleanup standards and, if appropriate, remediation levels or other performance standards have been attained.

(2) General requirements. Compliance monitoring shall be required for all cleanup actions, and may be required for interim and emergency actions conducted under this chapter. Unless otherwise directed by the department, a compliance monitoring plan shall be prepared.

Plans prepared under this section and under an order or decree shall be submitted to the department for review and approval. Protection monitoring may be addressed in the safety and health plan. Performance and confirmational monitoring may be addressed in separate plans or may be combined with other plans or submittals, such as those in WAC 173-340-400 and 173-340-820.

(3) Contents of a monitoring plan. Compliance monitoring plans may include monitoring for chemical constituents, biological testing, and physical parameters as appropriate for the site. Where the cleanup action includes engineered controls or institutional controls, the monitoring may need to include not only measurements but also documentation of observations on the performance of these controls. Long-term monitoring shall be required if on-site disposal, isolation, or containment is the selected cleanup action for a site or a portion of a site. Such measures shall be required until residual hazardous substance concentrations no longer exceed site cleanup levels established under WAC 173-340-700 through 173-340-760. Compliance monitoring plans shall be specific for the media being tested and shall contain the following elements:

(a) A sampling and analysis plan meeting the requirements of WAC 173-340-820 which shall explain in the statement of objectives how the purposes of subsection (1) of this section are met;

(b) Data analysis and evaluation procedures used, to demonstrate and confirm compliance and justification for these procedures, including:

(i) A description of any statistical method to be employed; or

(ii) If sufficient data is not available before writing the plan to propose a reliable statistical method to demonstrate and confirm compliance, a contingency plan proposing one or more reliable statistical methods to demonstrate and confirm compliance, and the conditions under which the methods would be used at the facility; and

(c) Other information as required by the department.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-410, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-410, filed 4/3/90, effective 5/4/90.]

WAC 173-340-420 Periodic review. (1) Purpose. A periodic review consists of a review by the department of post-cleanup site conditions and monitoring data to assure that human health and the environment are being protected.

(2) Applicability. The department shall conduct periodic reviews of a site whenever the department conducts a cleanup action; whenever the department approves a cleanup action under an order, agreed order or consent decree; or, as resources permit, whenever the department issues a no further action opinion; and one of the following conditions exists, at the site:

(a) Where an institutional control and/or financial assurance is required as part of the cleanup action;

(b) Where the cleanup level is based on a practical quantitation limit as provided for under WAC 173-340-707; and

(c) Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

(3) General requirements. If a periodic review is required under subsection (2) of this section, a review shall be conducted by the department at least every five years after the initiation of a cleanup action. The department may require potentially liable persons to submit information required by the department to conduct a periodic review.

(4) Review criteria. When evaluating whether human health and the environment are being protected, the factors the department shall consider include:

(a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the site;

(b) New scientific information for individual hazardous substances or mixtures present at the site;

(c) New applicable state and federal laws for hazardous substances present at the site;

(d) Current and projected site and resource uses;

(e) The availability and practicability of more permanent remedies; and

(f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

(5) Notice and public comment. The department shall publish a notice of all periodic reviews in the *Site Register* and provide an opportunity for public comment. The department shall also notify all potentially liable persons known to the department of the results of the periodic review.

(6) Determination of whether amendment of the cleanup action plan required. When the department determines that substantial changes in the cleanup action are necessary to protect human health and the environment at the site, a revised cleanup action plan shall be prepared. The department shall provide opportunities for public review and comment on the draft cleanup action plan in accordance with WAC 173-340-380 and 173-340-600.

(7) Determination of whether future periodic reviews required. In conducting a periodic review under this section, the department shall determine whether additional reviews are necessary, taking into consideration the factors in subsection (4) of this section. Sites with institutional controls shall remain subject to periodic reviews as long as the institutional controls are required under this chapter.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-420, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-420, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-420, filed 4/3/90, effective 5/4/90.]

WAC 173-340-430 Interim actions. (1) Purpose. An interim action is distinguished from a cleanup action in that an interim action only partially addresses the cleanup of a site. (Note: An interim action may constitute the cleanup action for a site if the interim action is subsequently shown to comply with WAC 173-340-350 through 173-340-390.) An interim action is:

(a) A remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance at a facility;

(b) A remedial action that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed; or

(c) A remedial action needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action.

Example. A site is identified where oil-based wood preservative has leaked from a tank and is puddled on the ground and is floating on the water table. Run-off from adjacent properties passes through the site. Neighborhood children have been seen on the site. In this case, several interim actions would be appropriate before fully defining the extent of the distribution of hazardous substances at the site and selecting a cleanup action. These interim actions might consist of removing the tank, fencing the site, rerouting run-off, and removing the product puddled on the ground and floating on the water table. Further studies would then determine what additional soil and ground water cleanup would be needed.

(2) General requirements.

Interim actions may:

(a) Achieve cleanup standards for a portion of the site;

(b) Provide a partial cleanup, that is, clean up hazardous substances from all or part of the site, but not achieve cleanup standards; or

(c) Provide a partial cleanup of hazardous substances and not achieve cleanup standards, but provide information on how to achieve cleanup standards for a cleanup. For example, demonstration of an unproven cleanup technology.

(3) Relationship to the cleanup action.

(a) If the cleanup action is known, the interim action shall be consistent with the cleanup action.

(b) If the cleanup action is not known, the interim action shall not foreclose reasonable alternatives for the cleanup action. This is not meant to preclude the destruction or removal of hazardous substances.

(4) Timing.

(a) Interim actions may occur anytime during the cleanup process. Interim actions shall not be used to delay or supplant the cleanup process. An interim action may be done before or in conjunction with a site hazard assessment and hazard ranking. However, sufficient technical information must be available regarding the facility to ensure the interim action is appropriate and warranted.

(b) Interim actions shall be followed by additional remedial actions unless compliance with cleanup standards has been confirmed at the site.

(c) The department shall set appropriate deadlines commensurate with the actions taken for completion of the interim action.

(5) Administrative options. Interim cleanup actions may be conducted under any of the procedures described in WAC 173-340-510 and 173-340-515.

(6) Public participation. Public participation will be accomplished in a manner consistent with WAC 173-340-600.

(7) Submittal requirements. Unless otherwise directed by the department and except for independent remedial actions, emergency remedial actions, and underground storage tank releases being addressed under WAC 173-340-450, a report shall be prepared before conducting an interim action. Reports prepared under an order or decree shall be submitted to the department for review and approval. Reports for independent remedial actions shall be submitted as required by WAC 173-340-515. Reports shall be of a scope and detail commensurate with the work performed and site-specific characteristics, and shall include, as appropriate:

(a) A description of the interim action and how it will meet the criteria identified in subsections (1), (2) and (3) of this section;

(b) Information from the applicable subsections of the remedial investigation/feasibility study of WAC 173-340-350, including at a minimum:

(i) A description of existing site conditions and a summary of all available data related to the interim action; and

(ii) Alternative interim actions considered and an explanation why the proposed alternative was selected;

(c) Information from the applicable subsections of the design and construction requirements of WAC 173-340-400; and

(d) A compliance monitoring plan meeting the applicable requirements of WAC 173-340-410;

(e) A safety and health plan meeting the requirements of WAC 173-340-810; and

(f) A sampling and analysis plan meeting the requirements of WAC 173-340-820.

(8) Construction. Construction of the interim action shall be in conformance with WAC 173-340-400(7).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-430, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-430, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-430, filed 4/3/90, effective 5/4/90.]

WAC 173-340-440 Institutional controls. (1) Purpose. Institutional controls are measures undertaken to limit or prohibit activities that may interfere with the integrity of an interim action or cleanup action or that may result in exposure to hazardous substances at a site. Institutional controls may include:

(a) Physical measures such as fences;

(b) Use restrictions such as limitations on the use of property or resources; or requirements that cleanup action occur if existing structures or pavement are disturbed or removed;

(c) Maintenance requirements for engineered controls such as the inspection and repair of monitoring wells, treatment systems, caps or ground water barrier systems;

(d) Educational programs such as signs, postings, public notices, health advisories, mailings, and similar measures that educate the public and/or employees about site contamination and ways to limit exposure; and

(e) Financial assurances (see subsection (11) of this section).

(2) Relationship to engineered controls. The term institutional controls refers to nonengineered measures while the term engineered controls means containment and/or treatment systems that are designed and constructed to prevent or limit the movement of, or the exposure to, hazardous substances. See the definition of engineered controls in WAC 173-340-200 for examples of engineered controls.

(3) Applicability. This section applies to remedial actions being conducted at sites under any of the administrative options in WAC 173-340-510 and 173-340-515.

(4) Circumstances required. Institutional controls shall be required to assure both the continued protection of human health and the environment and the integrity of an interim action or cleanup action in the following circumstances:

(a) The cleanup level is established using Method A or B and hazardous substances remain at the site at concentrations that exceed the applicable cleanup level;

(b) The cleanup level is established using Method C;

(c) An industrial soil cleanup level is established under WAC 173-340-745;

(d) A ground water cleanup level that exceeds the potable ground water cleanup level is established using a site-specific risk assessment under WAC 173-340-720 (6)(c) and institutional controls are required under WAC 173-340-720 (6)(c)(iii);

(e) A conditional point of compliance is established as the basis for measuring compliance at the site;

(f) Any time an institutional control is required under WAC 173-340-7490 through 173-340-7494; or

(g) Where the department determines such controls are required to assure the continued protection of human health and the environment or the integrity of the interim or cleanup action.

(5) Minimum requirements. Cleanup actions that use institutional controls shall meet each of the minimum requirements specified in WAC 173-340-360, just as any other cleanup action. Institutional controls should demonstrably reduce risks to ensure a protective remedy. This demonstration should be based on a quantitative, scientific analysis where appropriate.

(6) Requirement for primary reliance. In addition to meeting each of the minimum requirements specified in WAC 173-340-360, cleanup actions shall not rely primarily on institutional controls and monitoring where it is technically possible to implement a more permanent cleanup action for all or a portion of the site.

(7) Periodic review. The department shall review compliance with institutional control requirements as part of periodic reviews under WAC 173-340-420.

(8) Format.

(a) For properties owned by a person who has been named as a potentially liable person or who has not been named a potentially liable person by the department but meets the criteria in RCW 70.105D.040 for being named a potentially liable person, appropriate institutional controls shall be described in a restrictive covenant on the property. The covenant shall be executed by the property owner and recorded with the register of deeds for the county in which the site is located. This restrictive covenant shall run with the land, and be binding on the owner's successors and assigns.

(b) For properties owned by a local, state, or federal government entity, a restrictive covenant may not be required if that entity demonstrates to the department that:

(i) It does not routinely file with the county recording officer records relating to the type of interest in real property that it has in the site; and

(ii) It will implement an effective alternative system to meet the requirements of subsection (9) of this section.

The department shall require the government entity to implement the alternative system as part of the cleanup action plan. If a government entity meets these criteria, and if it subsequently transfers its ownership in any portion of the property, then the government entity must file a restrictive covenant upon transfer if any of the conditions in subsection (4) of this section still exist.

(c) For properties containing hazardous substances where the owner does not meet the criteria in RCW 70.105D.040 for being a potentially liable person, the department may approve cleanup actions that include restrictive covenants or other legal and/or administrative mechanisms. The use of legal or administrative mechanisms that do not include restrictive covenants is intended to apply to situations where the release has affected properties near the source of the release not owned by a person potentially liable under the act. A potentially liable person must make a good faith effort to obtain a restrictive covenant before using other legal or administrative mechanisms. Examples of such mechanisms include zoning overlays, placing notices in local zoning or

building department records or state lands records, public notices and educational mailings.

(9) Restrictive covenants. Where required, the restrictive covenant shall:

(a) Prohibit activities on the site that may interfere with a cleanup action, operation and maintenance, monitoring, or other measures necessary to assure the integrity of the cleanup action and continued protection of human health and the environment;

(b) Prohibit activities that may result in the release of a hazardous substance that was contained as a part of the cleanup action;

(c) Require notice to the department of the owner's intent to convey any interest in the site. No conveyance of title, easement, lease, or other interest in the property shall be consummated by the property owner without adequate and complete provision for the continued operation, maintenance and monitoring of the cleanup action, and for continued compliance with this subsection;

(d) Require the land owner to restrict leases to uses and activities consistent with the restrictive covenant and notify all lessees of the restrictions on the use of the property. This requirement applies only to restrictive covenants imposed after February 1, 1996;

(e) Require the owner to include in any instrument conveying any interest in any portion of the property, notice of the restrictive covenant under this section;

(f) Require notice and approval by the department of any proposal to use the site in a manner that is inconsistent with the restrictive covenant. If the department, after public notice and comment approves the proposed change, the restrictive covenant shall be amended to reflect the change; and

(g) Grant the department and its designated representatives the right to enter the property at reasonable times for the purpose of evaluating compliance with the cleanup action plan and other required plans, including the right to take samples, inspect any remedial actions taken at the site, and to inspect records.

(10) Local government notification. Before a restrictive covenant being established under this chapter, the department shall notify and seek comment from a city or county department with land use planning authority for real property subject to the restrictive covenant. Once a restrictive covenant has been executed, this same department shall be notified and sent a copy of the restrictive covenant. For independent cleanups reviewed by the department under WAC 173-340-515 that use restrictive covenants, the person conducting the cleanup shall be responsible for these notifications.

(11) Financial assurances. The department shall, as appropriate, require financial assurance mechanisms at sites where the cleanup action selected includes engineered and/or institutional controls. It is presumed that financial assurance mechanisms will be required unless the PLP can demonstrate that sufficient financial resources are available and in place to provide for the long-term effectiveness of engineered and institutional controls adopted. Financial assurances shall be of sufficient amount to cover all costs associated with the operation and maintenance of the cleanup action, including institutional controls, compliance monitoring, and corrective measures.

(a) Mechanisms. Financial assurance mechanisms may include one or more of the following: A trust fund, a surety bond, a letter of credit, financial test, guarantee, standby trust fund, government bond rating test, government financial test, government guarantee, government fund, or financial assurance mechanisms required under another law (for example, requirements for solid waste landfills or treatment, storage, and disposal facilities) that meets the requirements of this section.

(b) Exemption from requirement. The department shall not require financial assurances if persons conducting the cleanup can demonstrate that requiring financial assurances will result in the PLPs for the site having insufficient funds to conduct the cleanup or being forced into bankruptcy or similar financial hardship.

(12) Removal of restrictions. If the conditions at the site requiring an institutional control under subsection (4) of this section no longer exist, then the owner may submit a request to the department that the restrictive covenant or other restrictions be eliminated. The restrictive covenant or other restrictions shall be removed, if the department, after public notice and opportunity for comment, concurs.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-440, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-440, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-440, filed 1/28/91, effective 2/28/91.]

WAC 173-340-450 Releases from underground storage tanks. (1) Purpose. The purpose of this section is to set forth the requirements for addressing releases that may pose a threat to human health or the environment from an underground storage tank (UST) regulated under chapter 90.76 RCW.

(a) Releases from USTs exempted under chapter 90.76 RCW and rules adopted therein are still subject to all other requirements of this chapter.

(b) Unless the department requires otherwise, UST owners and UST operators regulated under chapter 90.76 RCW shall comply with the requirements in this section after confirmation of an UST release that may pose a threat to human health or the environment.

(2) Initial response. Within twenty-four hours of confirmation of an UST release, the UST owner or the UST operator shall perform the following actions:

(a) Report the UST release to the department and other authorities with jurisdiction, in accordance with rules adopted under chapter 90.76 RCW and any other applicable law;

(b) Remove as much of the hazardous substance from the UST as is possible and necessary to prevent further release to the environment;

(c) Eliminate or reduce any fire, explosion or vapor hazards in such a way as to minimize any release of hazardous substances to surface water and ground water; and

(d) Visually inspect any aboveground releases or exposed belowground releases and prevent the hazardous substance from spreading into surrounding soils, ground water and surface water.

(3) Interim actions.

(a) As soon as possible but no later than twenty days following confirmation of an UST release, the UST owner or the UST operator shall perform the following interim actions:

(i) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that may have migrated from the UST into structures in the vicinity of the site, such as sewers or basements;

(ii) Reduce the threat to human health and the environment posed by contaminated soils that are excavated or discovered as a result of investigation or cleanup activities. Treatment, storage and disposal of soils must be carried out in compliance with all applicable federal, state and local requirements;

(iii) Test for hazardous substances in the environment where they are most likely to be present. Such testing shall be done in accordance with a sampling and analysis plan prepared under WAC 173-340-820. The sample types, sample locations, and measurement methods shall be based on the nature of the stored substance, type of subsurface soils, depth to ground water and other factors as appropriate for identifying the presence and source of the release. If contaminated soil is found in contact with the ground water or soil contamination appears to extend below the lowest soil sampling depth, then testing shall include the installation of ground water monitoring wells to test for the presence of possible ground water contamination. Information gathered for the site check or closure site assessment conducted under rules adopted under chapter 90.76 RCW, which sufficiently characterizes the releases at the site, may be substituted for the testing required under this paragraph;

(iv) The testing performed under (a)(iii) of this subsection shall use the analytical methods specified in WAC 173-340-830 and include, at a minimum, the following:

(A) For petroleum product releases, the concentration(s) of hazardous substances potentially present at the site, as appropriate for the type of petroleum product(s) released. The minimum testing requirements are specified in Table 830-1.

(B) The hazardous substance stored and any likely decomposition by-products where a hazardous substance other than petroleum may be present; and

(C) Any other tests required by the department; and

(v) Investigate for the presence of free product.

(4) Free product removal. At sites where investigations indicate free product is present, the UST owner or the UST operator shall conduct, as soon as possible after discovery, an interim action to remove the free product while continuing, as necessary, any other actions required under this section. To accomplish this the UST owner or UST operator shall:

(a) Conduct free product removal to the maximum extent practicable and in a manner that minimizes the spread of hazardous substances, by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site. The objective of free product removal system must be, at a minimum, to stop the free product migration;

(b) Properly treat, discharge, or dispose of any hazardous substance, water, sludge or any other materials collected in the free product removal process in compliance with all applicable local, state, and federal regulations and permits; and

(c) Handle all flammable products safely to prevent fires and explosions.

(5) Reporting requirements. The following reports are required to be submitted to the department:

(a) Status report. Within twenty days after an UST release, the UST owner or UST operator shall submit a status report to the department. The status report shall identify if known, the types, amounts, and locations of hazardous substances released, how the release occurred, evidence confirming the release, actions taken under subsections (2) and (3) of this section, any planned remedial actions, and any results of work done up to the time of the report. This report may be provided verbally to the department.

(b) Site characterization reports. Within ninety days after release confirmation, unless directed to do otherwise by the department, the UST owner or UST operator shall submit a report to the department about the site and nature of the release. This report shall be submitted to the department in writing and may be combined with the twenty-day status report, if the information required is available at that time. The site characterization report shall include, at a minimum, the following information:

(i) The information required for the status report under (a) of this subsection;

(ii) A site conditions map indicating approximate boundaries of the property, all areas where hazardous substances are known or suspected to be located, and sampling locations. This map may consist of a sketch of the site at a scale sufficient to illustrate this information;

(iii) Available data regarding surrounding populations, surface and ground water quality, use and approximate location of wells potentially affected by the release, subsurface soil conditions, depth to ground water, direction of ground water flow, proximity to and potential for affecting surface water, locations of sewers and other potential conduits for vapor or free product migration, surrounding land use, and proximity to sensitive environments;

(iv) Results of tests for hazardous substances performed under subsection (3)(a)(iii) and (iv) of this section;

(v) Results of the free product investigation required under subsection (3)(a)(v) of this section;

(vi) Results of all completed site investigations, interim actions and cleanup actions and a description of any remaining investigations, cleanup actions and compliance monitoring that are planned or underway; and

(vii) Information on the free product removal efforts at sites where investigations indicate free product is present. This shall include, at a minimum, the following information:

(A) Name of the person responsible for implementing the free product removal measures;

(B) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes and excavations;

(C) The type of free product recovery system used;

(D) The location of any on-site or off-site discharge during the recovery operation;

(E) The type of treatment applied to, and the effluent quality expected from, any discharge;

(F) The steps taken and planned to obtain necessary permits for any discharge;

(G) Disposition of recovered free product; and

(viii) Any other information required by the department.

(6) Remedial investigation and feasibility study.

(a) If the initial cleanup actions taken at an UST site do not achieve cleanup levels throughout the site, a remedial investigation and feasibility study may need to be conducted in accordance with WAC 173-340-350. The scope of a remedial investigation and feasibility study will depend on the informational needs at the site. UST owners and operators shall conduct a remedial investigation and feasibility study for sites where the following conditions exist:

(i) There is evidence that the release has caused hazardous substances to be present in the ground water in excess of the ground water standards adopted under chapter 90.48 RCW or cleanup levels in WAC 173-340-720 (Table 720-1);

(ii) Free product is found; or

(iii) Where otherwise required by the department.

(b) UST owners and UST operators shall submit the information collected for the remedial investigation/feasibility study to the department as soon as practicable. The information may be included with other reports submitted under this section.

(c) If the department determines, based on the results of the remedial investigation/feasibility study or other information, that additional remedial action is required, the department may require the UST owner or the UST operator to submit engineering documents as described in WAC 173-340-400.

(7) Cleanup actions. Unless directed to do otherwise by the department, cleanup actions performed by UST owners or UST operators shall comply with the cleanup standards described in WAC 173-340-700 through 173-340-760 and the requirements for the selection of cleanup actions in WAC 173-340-350 through 173-340-390.

(8) Independent cleanup actions. In addition to work performed under subsections (2) through (5), and (7) of this section, UST owners or UST operators performing independent cleanup actions shall:

(a) Notify the department of their intention to begin cleanup. This can be included with other reports under this section;

(b) Comply with any conditions imposed by the department to assure adequate protection of human health and the environment; and

(c) Within ninety days of completion of the cleanup action, submit the results of all investigations, interim and cleanup actions and compliance monitoring not previously submitted to the department.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-450, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-450, filed 1/28/91, effective 2/28/91.]

PART V—ADMINISTRATIVE PROCEDURES FOR REMEDIAL ACTIONS

WAC 173-340-500 Determination of status as a potentially liable person. (1) Status letter. The department shall issue a potentially liable person status letter to any person it believes to be potentially liable as provided for in RCW 70.105D.020(8), unless an emergency requires otherwise. Persons will be notified when the department has credible evidence of their potential liability under RCW 70.105D.040 and when the department is ready to proceed with remedial action except for emergencies and initial investigations. The status letter shall be sent by certified mail, return receipt requested, or by personal service.

(2) Contents of letter. The status letter shall provide:

(a) The name of the person the department believes to be potentially liable;

(b) A general description of the location of the facility;

(c) The basis for the department's belief that the person has a relationship to the facility;

(d) The basis for the department's belief that a release or threatened release of a hazardous substance has occurred at the facility and that the release or threatened release poses a threat to human health or the environment;

(e) An indication of the department's intentions regarding enforcement or other actions at the facility; and

(f) The names of other persons to whom the department has sent a status letter.

(3) Opportunity to comment. Any comments shall be submitted in writing to the department within thirty days from the date of receipt by the potentially liable person of the status letter unless the department provides an extension.

(4) Determination of status. If after reviewing any comments submitted, the department concludes that credible evidence supports a finding of potential liability, then the department shall issue a determination of potentially liable person status.

(5) Voluntary waiver. Persons may accept status as a potentially liable person at any time through a voluntary waiver of their right to notice and comment.

(6) Additional potentially liable persons. The department reserves the right to notify additional potentially liable persons at any time, and as resources permit, will facilitate potentially liable persons' efforts to identify additional potentially liable persons. The department shall notify in writing, all persons who previously received a status letter for the facility whenever additional status letters have been sent.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-500, filed 4/3/90, effective 5/4/90.]

WAC 173-340-510 Administrative options for remedial actions. (1) Policy. It is the responsibility of each and every liable person to conduct remedial action so that sites are cleaned up well and expeditiously where a release or threatened release of a hazardous substance requires remedial action. Potentially liable persons are encouraged to initiate discussions and negotiations with the department and the office of the attorney general that may lead to an agreement on the remedial action to be conducted with the state of Washington. The department may provide informal advice and assistance on the development of proposals for remedial action, as provided by WAC 173-340-515. Any approval by the department or the state of remedial action shall occur by one of the means described in subsections (2) and (3) of this section.

(2) Actions initiated by the potentially liable person. Potentially liable persons may initiate a remedial action, as follows:

(a) A person may initiate negotiations for a consent decree by submitting a letter under WAC 173-340-520(1).

(b) A person may request an agreed order by submitting a letter under WAC 173-340-530.

(3) Action initiated by the department. The department may initiate remedial action by:

(a) Issuing a letter inviting negotiations on a consent decree under WAC 173-340-520(2); or

(b) Requesting an agreed order under WAC 173-340-530; or

(c) Issuing an enforcement order under WAC 173-340-540.

(4) Department remedial action. Nothing in this chapter shall preclude the department from taking appropriate remedial action on its own at any time. Except for emergency actions and initial investigations, reasonable effort will be made to notify potentially liable persons before the department takes remedial actions for which the recovery of public funds can be sought under RCW 70.105D.050(3).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-510, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-510, filed 4/3/90, effective 5/4/90.]

WAC 173-340-515 Independent remedial actions. (1) **Purpose.** An independent remedial action is a remedial action conducted without department oversight or approval and not under an order, agreed order or consent decree. This section describes the procedures and requirements for independent remedial actions. See WAC 173-340-545 for additional requirements pertaining to independent remedial actions anticipated to be part of a private right of action.

(2) **Applicability.** Nothing in this chapter shall preclude potentially liable persons from conducting independent remedial actions at sites not in discussions or negotiations for, or under, an order or decree. However, a potentially liable person may not conduct independent remedial actions after commencing discussions or negotiations for an agreed order or consent decree unless:

(a) Such action does not foreclose or preempt the remedial actions under discussion or negotiation and such action does not foreclose the selection of a cleanup action; or

(b) The potentially liable person has provided reasonable notice to the department and the department does not object to such action.

(3) **Standards.**

(a) In reviewing independent remedial actions, the department shall determine whether the remedial actions meet the substantive requirements of this chapter and/or whether further remedial action is necessary at the site. Persons conducting independent remedial actions do so at their own risk, and may be required to take additional remedial actions if the department determines such actions are necessary. In such circumstances, the department reserves all of its rights to take actions authorized by law.

(b) When this chapter requires a consultation with, or an approval or determination by the department, such a consultation, approval or determination is not necessary in order to conduct an independent remedial action. However, independent remedial actions must still meet the substantive requirements of this chapter.

(c) Except for the requirement of a restrictive covenant under WAC 173-340-440, where documents are required under this chapter, the documents prepared need not be the same in title or format; however, the documents must still contain sufficient information to serve the same purpose. The scope and level of detail in these documents may vary from site to site depending on the site-specific conditions and the complexity of the remedial action.

(4) **Reports to the department.**

(a) Any person who conducts an independent interim action or cleanup action for a release that is required to be reported under WAC 173-340-300 shall submit a written report to the department within ninety days of the completion of the action. For the purposes of this section, the department will consider an interim action or cleanup action complete if no remedial action other than compliance monitoring has occurred at the site for ninety days. This does not preclude earlier reporting of such actions or reporting of site investigations. See WAC 173-340-450 for additional requirements for reporting independent remedial actions for releases from underground storage tanks.

(b) The report shall include the information in WAC 173-340-300(2) if not already reported, and enough information to determine if the independent remedial action meets the substantive requirements of this chapter including, the results of all site investigations, cleanup actions and compliance monitoring planned or under-way. If a restrictive covenant is used, it must be included in the report and it must meet the requirements specified in WAC 173-340-440(9). The department may require additional reports on the work conducted.

(c) If the independent interim action or cleanup action is completed within ninety days of discovery, a single written report may be submitted on both the release and the action taken. The report shall contain the information specified in provision (b) of this subsection and shall be submitted within ninety days of completion of the remedial action.

(d) The department shall publish in the *Site Register* a notice of all reports on independent interim actions and cleanup actions received under this section. If deemed necessary, the department shall also conduct an initial investigation under WAC 173-340-310. Neither submission of information on an independent remedial action nor any response by the department shall release the person submitting the report or any other person from liability. The department reserves all rights to pursue any subsequent action it deems appropriate.

(5) **Technical consultations.** The department may provide informal advice and assistance (technical consultations) on the administrative and technical requirements of this chapter to persons conducting or otherwise interested in an independent remedial action. Such advice or assistance is advisory only and not binding on the department. This advice may include written opinions. These written opinions shall be limited to whether the independent remedial actions or proposals for those actions meet the substantive requirements of this chapter and/or whether the department believes further remedial action is necessary at the facility. Upon completing the review of an independent remedial action report or proposal that is voluntarily submitted for the department's review and opinion, the department will:

(a) Provide a written opinion regarding the remedial actions performed or proposed at the site;

(b) Provide a written opinion regarding the remedial actions performed at the site and remove the site or a portion of the site from the hazardous sites list if the department has sufficient information to show that the independent remedial actions are appropriate to characterize and address contamination at the site, as provided for in WAC 173-340-330 (4)(b); or

(c) Provide a written opinion describing the deficiencies with the remedial action or proposal for a remedial action at the site.

It is the department's policy, in conducting reviews under this subsection, to promote independent remedial actions by delisting sites or portions of sites whenever petitions and supporting documents show that the actions taken are appropriate to characterize and address the contamination at the site.

(6) **Cost of technical consultations.** For information on the payment of remedial action costs, see WAC 173-340-550(6).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-515, filed 2/12/01, effective 8/15/01.]

WAC 173-340-520 Consent decrees. (1) Procedures for consent decrees initiated by potentially liable persons. To request a consent decree a person shall submit a letter to the department and office of the attorney general via certified mail, return receipt requested, or by personal delivery.

(a) Request. The letter shall describe, based on available information:

(i) The proposed remedial action, including the schedule for the work;

(ii) Information which demonstrates that the settlement will lead to a more expeditious cleanup, be consistent with cleanup standards if the remedial action is a cleanup action, and be consistent with any previous orders;

(iii) The facility, including location and boundaries;

(iv) The environmental problems to be addressed including a description of the releases at the facility and the potential impact of those releases to human health and the environment;

(v) A summary of the relevant historical use or conditions at the facility;

(vi) The date on which the potentially liable person will be ready to submit a detailed proposal;

(vii) Any special scheduling considerations for implementing the remedial actions;

(viii) Names of other persons who the person has reason to believe may be potentially liable persons at the facility; and

(ix) A proposed public participation plan. This proposed plan shall be commensurate with the nature of the proposal and site and shall include the elements listed in WAC 173-340-600(8).

(b) The letter may include:

(i) A waiver of the procedural requirements of WAC 173-340-500 and acceptance, for purposes of settlement, of potentially liable person status.

(ii) The contents of detailed proposal under (g) of this subsection.

(c) A prospective purchaser consent decree is a particular type of consent decree entered into with a person not currently liable for remedial action at the site who proposes to purchase, redevelop, or reuse the site. RCW 70.105D.040(5) contains specific statutory requirements for this type of decree. In addition to the information in (a) and (b) of this subsection, a request for a prospective purchaser consent decree shall include:

(i) Identification of all persons proposing to enter into the consent decree and information which demonstrates that those persons are not currently liable for remedial action at the site;

(ii) Information which demonstrates that the settlement will yield substantial new resources to facilitate cleanup;

(iii) A general description of the proposed continued use or redevelopment or reuse of the site, including the proposed schedule for purchase, redevelopment, or reuse; and

(iv) Information describing whether and how the proposed settlement will provide a substantial public benefit.

(d) Recognizing that the steps of the cleanup process may be combined and may vary by site, the information in the request shall be at the level of detail appropriate to the steps in the process for which the consent decree is requested. For example, a request for a consent decree for a remedial investigation/feasibility study should generally include the level of information needed for a site hazard assessment, if not already done by the department, so that the department and the public can evaluate the proposed scope of work and relative priority of the site.

(e) The department may waive part of the letter requirements of (a) of this subsection if the requirements have already been met.

(f) Response. The department shall respond to the request within sixty days, unless the department needs additional time to determine potentially liable person status under WAC 173-340-500. This determination will be based in part on a preliminary finding by the department that any resulting consent decree would be in accordance with RCW 70.105D.040 (4)(a). The department may:

(i) Request additional information;

(ii) Accept the request and require the person to submit a detailed written proposal by a specified date; or

(iii) Provide written reasons for denying the request.

(g) Contents of detailed proposal. The proposal shall contain:

(i) A proposed technical scope of work describing the remedial action to be conducted;

(ii) The data, studies, or any other information upon which the settlement proposal is based;

(iii) A statement describing the potentially liable person's ability to conduct or finance the remedial action as described in the proposed scope of work;

(iv) A schedule for proposed negotiations and implementation of the proposed remedial actions; and

(v) Any additional information requested by the department.

(h) In addition to the information in (g) of this subsection, the detailed proposal for a prospective purchaser consent decree shall include the following:

(i) Information showing a legal commitment to purchase, redevelop or reuse the site;

(ii) A detailed description including a plan of the proposed continued use, redevelopment, or reuse of the site, including, if necessary, an updated schedule for purchase, redevelopment or reuse;

(iii) Information which demonstrates that the redevelopment or reuse of the site is not likely to contribute to the existing or threatened releases at the site, interfere with remedial actions that may be needed at the site, or increase health risks to persons at or in the vicinity of the site; and

(iv) If the requestor does not propose to conduct the entire cleanup of the site, available information about potentially liable persons who are expected to conduct the remainder of the cleanup.

(i) The department and the office of the attorney general shall determine whether the proposal provides a sufficient basis for negotiations, and shall deliver to the potentially liable person within sixty days following receipt of their proposal a written notice indicating whether or not the proposal is sufficient to proceed with negotiations.

(j) Prepayment agreement. Unless otherwise determined by the department, any person who requests a prospective purchaser agreement and receives a notice accepting the request under (f) of this subsection shall enter into a prepayment agreement with the department consistent with WAC 173-340-550(7) before negotiations will begin.

(k) Time limits for negotiations. The department shall set the time period and starting date for negotiations. The department and the office of the attorney general shall then negotiate with those potentially liable persons who have received a notice under (f) of this subsection that their proposal was sufficient to proceed with negotiations. Negotiations may address one or more phases of remedial action. The length of the negotiation period specified by the department shall be no less than that proposed by the potentially liable person provided it does not conflict with the deadlines established under WAC 173-340-140.

(l) Enforcement stay. For consent decrees that are not prospective purchaser agreements, unless an emergency exists, the department will stay any enforcement action under chapter 70.105D RCW, but the duration of such stay shall not exceed one hundred twenty days from the date negotiations begin. The department can withdraw from negotiations if it determines that:

(i) Reasonable progress is not being made toward a consent decree acceptable to the department; or

(ii) The proposal is inappropriate based on new information or changed circumstances.

The department may begin an enforcement action after notifying the potentially liable person, in writing, of its intent to withdraw from negotiations.

(2) Procedures for consent decrees initiated by the department. When the department believes that a consent decree will be a more expeditious method to achieve remedial action at a facility, it may initiate the procedures set forth in this subsection by sending a letter to the potentially liable person. The letter shall be sent via certified mail, return receipt requested, or by personal service.

(a) The letters may be delivered with potentially liable person status letters issued under WAC 173-340-500. The period for negotiation shall not commence until the thirty-day comment period required by WAC 173-340-500 has expired or the person expressly waives the procedural requirements of WAC 173-340-500.

(b) Contents of letter. The letter shall:

(i) Inform potentially liable person(s) that the department and the attorney general want to begin negotiations which may lead to a consent decree providing for remedial action;

(ii) Propose a draft consent decree and scope of work;

(iii) Define the negotiation process and schedule which shall not exceed ninety days;

(iv) Reference the department's finding under WAC 173-340-500;

(v) Request a written statement of the potentially liable person's willingness to proceed with the negotiation process defined in the letter; and

(vi) Request the names of other persons whom the person has reason to believe may be potentially liable persons at the facility.

(c) The letter may request the potentially liable person to respond, in writing, to the proposed draft consent decree and scope of work before beginning the negotiation phase.

(d) Negotiations. The department and the office of the attorney general shall negotiate with potentially liable persons who have indicated to the department a willingness to proceed with the negotiations. The negotiation time frame shall begin from the date the potentially liable person receives the letter under (a) of this subsection unless modified by the department. Negotiations may address one or more phases of remedial action.

(e) Enforcement stay. Unless an emergency exists, the department will stay any enforcement action under chapter 70.105D RCW, but the duration of the stay shall not exceed ninety days from the date negotiations begin. The department can withdraw from negotiations if it determines that:

(i) Reasonable progress is not being made toward a consent decree acceptable to the department; or

(ii) The proposal is inappropriate based on new information or changed circumstances. The department may commence with enforcement action after notifying the potentially liable person, in writing, of its intent to withdraw from negotiations.

(f) Deadline extensions. The department may, at its discretion, extend the deadline for negotiations established in (b) of this subsection, provided the extension does not exceed thirty days.

(3) Filing a decree. After satisfying the public comment and hearing requirements, the department shall determine whether the proposed settlement negotiated under subsection (1) or (2) of this section, is more expeditious and consistent with cleanup standards established and in compliance with any order issued by the department relevant to the remedial action. After making the requisite findings, the department shall forward the proposed consent decree with the findings required by RCW 70.105D.040(4), to the office of the attorney general. If agreed to by the office of the attorney general, the consent decree will be filed by that office with the appro-

priate superior court or the federal court having jurisdiction over the matter.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-520, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-520, filed 4/3/90, effective 5/4/90.]

WAC 173-340-530 Agreed orders. (1) Purpose. Agreed orders may be used for all remedial actions. An agreed order means that the potentially liable person agrees to perform remedial actions at the site in accordance with the provisions of the agreed order and that the department will not take additional enforcement action against the potentially liable person to require those remedial actions specified in the agreed order so long as the potentially liable person complies with the provisions of the order. Since an agreed order is not a settlement, an agreed order shall not provide for mixed funding, a covenant not to sue, or protection from claims for contribution. The department may require additional remedial actions should it deem such actions necessary.

(2) Procedures for agreed orders initiated by a potentially liable person.

(a) To request an agreed order, a person shall submit a letter to the department based on available information, describing:

(i) The proposed remedial action including a schedule for the work;

(ii) The facility, including location and boundaries;

(iii) The environmental problems to be addressed, including the releases at the facility and the potential impact of those releases to human health and the environment;

(iv) A summary of the relevant historical use or conditions at the facility;

(v) Names of other persons whom the person has reason to believe may be potentially liable persons at the facility; and

(vi) A proposed public participation plan. This proposed plan shall be commensurate with the nature of the proposal and site and shall include, at a minimum, the elements listed in WAC 173-340-600(8).

(b) The letter may include a waiver of the procedural requirements of WAC 173-340-500, and acceptance, for purposes of the agreed order, of potentially liable person status.

(c) Recognizing that the basic steps of the cleanup process may be combined and may vary by site, the information in the request shall be at the level of detail appropriate to the step in the process for which the order is requested. For example, a request for an agreed order for a remedial investigation/feasibility study should generally include the level of information needed for a site hazard assessment, so that the department and the public can evaluate the proposed scope of work and relative priority of the site.

(d) The department may waive part of the letter requirements of (a) of this subsection if the requirements have already been met.

(3) Department response to PLP-initiated request. The department shall respond to the request within sixty days, unless the department needs additional time to determine potentially liable person status under WAC 173-340-500. The department may:

(a) Request additional information;

(b) Proceed with discussions, if the department believes it is in the public interest to do so; or

(c) Provide written reasons for denying the request.

(4) Procedures for agreed orders initiated by the department. When the department believes that an agreed order is an appropriate method to achieve remedial action at a facility, it may initiate the request for an agreed order.

(5) Duration of discussions. Discussions on the agreed order shall not exceed sixty days unless the department decides continued discussions are in the public interest.

(6) Enforcement. Unless an emergency exists, the department will stay any enforcement action under chapter 70.105D RCW; however, the duration of such stay shall not exceed sixty days from the date discussions begin. Furthermore, the department can withdraw from discussions if it determines that:

(a) Reasonable progress is not being made toward an agreed order acceptable to the department; or

(b) The agreed order is inappropriate based on new information or changed circumstances.

The department may begin an enforcement action after notifying the potentially liable person in writing of its intent to withdraw from discussions.

(7) Focus of discussions. The focus of discussions for the agreed order shall ordinarily be the technical scope of work and work schedule. This subsection is not intended to preclude discussion on any item. It is intended to convey the expectation that the scope of work and work schedule will be the primary topics of discussion in developing agreed orders.

(8) Public participation.

(a) When issuing an agreed order, the department shall provide appropriate public participation opportunities under WAC 173-340-600.

(b) If the department and the potentially liable person signing the order agree to substantial changes in the order, the department shall provide appropriate additional public notice and opportunity to comment.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-530, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-530, filed 1/26/96, effective 2/26/96; 90-08-086, § 173-340-530, filed 4/3/90, effective 5/4/90.]

WAC 173-340-540 Enforcement orders. The department may issue an enforcement order requiring remedial action after issuing a notice of potentially liable person status letter under WAC 173-340-500. In emergencies, the notice of potentially liable person status may occur concurrently with the issuance of the order. Unless an emergency requires otherwise, the issuance of a potentially liable person status letter shall precede or take place concurrently with the issuance of an enforcement order. Furthermore, except in an emergency, the department shall issue its determination under WAC 173-340-500(4) before an enforcement order can become effective. Failure to comply with an enforcement order may result in substantial liability for costs and penalties as specified in RCW 70.105D.050.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-540, filed 4/3/90, effective 5/4/90.]

WAC 173-340-545 Private rights of action. (1) **Purpose.** A private right of action is a legal claim authorized by RCW 70.105D.080 under which a person may recover costs of remedial action from other persons liable under the act. RCW 70.105D.080 limits recovery of remedial action costs to those remedial actions that, when evaluated as a whole, are the substantial equivalent of a department-conducted or department-supervised remedial action. The purpose of this section is to facilitate private rights of action and minimize department staff involvement in these actions by providing guidance to potentially liable persons and the court on what remedial actions the department would consider the substantial equivalent of a department-conducted or department-supervised remedial action. In determining substantial equivalence, the department anticipates the requirements in this section will be evaluated as a whole and that a claim would not be disallowed due to omissions that do not diminish the overall effectiveness of the remedial action.

(2) **Substantial equivalent.** For the purposes of this section, the department considers the following remedial actions to be the substantial equivalent of a department-conducted or department-supervised remedial action.

(a) A remedial action conducted by the department;

(b) A remedial action that has been or is being conducted under an order or decree and the remedial requirements of the order or decree have been satisfied for those portions of the remedial action for which the private right of action is being sought; or

(c) A remedial action that has been conducted as an independent remedial action that includes the following elements:

(i) Information on the site and remedial actions conducted has been reported to the department in accordance with WAC 173-340-300, 173-340-450 and 173-340-515, as applicable;

(ii) The department has not objected to the remedial action being conducted or any such objection has been cured as determined by the court;

(iii) Except for emergency remedial actions, before conducting an interim action or cleanup action, reasonable steps have been taken to provide advance public notice;

(iv) The remedial actions have been conducted substantially equivalent with the technical standards and evaluation criteria described in subsection (4) of this section; and

(v) For facilities where hazardous substances have been disposed of as part of the remedial action, documentation is available indicating where these substances were disposed of and that this disposal was in compliance with applicable state and federal laws. It is not the intent of this provision to require extensive documentation. For example, if the remedial action results in solid wastes being transported off-site for disposal, it would be sufficient to have records indicating the wastes have been disposed of at a permitted solid waste or hazardous waste landfill.

(3) **Public notice requirements.** This subsection shall be used to determine if reasonable steps have been taken to provide advance public notice under subsection (2)(c)(iii) of this section. These public notice procedures apply only to interim actions or cleanup actions conducted as independent remedial actions after December 25, 1993. The notice may be combined with any notices under another law. For interim actions or cleanup actions conducted as independent remedial actions before December 25, 1993, the department recognizes little or no public notification typically occurred because there were no department-specified requirements other than the reporting requirements in this chapter. For these actions, this chapter contains no other specific public notice requirements or guidance, and the court will need to determine such requirements, if any, on a case-by-case basis. For independent remedial actions consisting of site investigations and studies, it is anticipated that public notice would not normally be done since often these early phases of work are to determine if a release even requires an interim action or cleanup action. For the purposes of this section only, unless the court determines other notice procedures are adequate for the site-specific circumstances, the following constitutes adequate public notice for independent remedial actions and supersedes the requirements in WAC 173-340-600:

(a) Except for emergency remedial actions, written notification has been mailed at least fifteen days before beginning construction of the interim action or cleanup action to the last known address of the following persons:

(i) The department (which shall publish a summary of the notice in the *Site Register*);

(ii) The local jurisdictional health department/district;

(iii) The town, city or county with land use jurisdiction;

(iv) The land owners identified by the tax assessor at the time the action is begun for that portion of the facility where the interim action or cleanup action is being conducted; and

(v) Persons potentially liable under RCW 70.105D.040 known to the person conducting the interim action or cleanup action. In identifying persons potentially liable under RCW 70.105D.040 who are to be noticed under this provision, the person conducting the remedial action need only make a reasonable effort to review information currently readily available. Where the interim action or cleanup action is complex, written notification before beginning detailed design is recommended but not required. For emergency remedial actions, written notice should be provided as soon as practicable;

(b) The written notification includes: A brief statement describing the releases being remedied and the interim actions or cleanup actions expected to be conducted; the schedule for these interim actions or cleanup actions; and, for persons potentially liable under RCW 70.105D.040 known to the person conducting the interim actions or cleanup actions, a statement that they could be held liable for the costs of remedial actions being conducted; and

(c) Posting a sign at the site at a location visible to the general public indicating what interim actions or cleanup actions are being conducted and identifying a person to contact for more information. Except for emergency remedial actions this sign should be posted not later than the beginning of construction of any interim action or cleanup action and should remain posted for the duration of the construction. For emergency remedial actions posting of a sign should be done as soon as practicable;

(4) **Technical standards and evaluation criteria.** This subsection shall be used to determine if the remedial actions have been conducted substantially equivalent with the technical standards and evaluation criteria contained in this chapter. For the purposes of this section, remedial actions shall be

deemed to comply with subsection (2)(c)(iv) of this section if they have been conducted substantially equivalent with the technical standards and evaluation criteria contained in the following sections, where applicable. Except for a restrictive covenant under WAC 173-340-440, where documents are required by the following sections, the documents prepared need not be the same in title or format. Other documents can be used in place of the documents specified in these sections as long as sufficient information is included in the record to serve the same purpose. When using the following sections to determine substantial equivalence it should be recognized that there are often many alternative methods for cleanup of a facility that would comply with these provisions. When this chapter requires a consultation with, or an approval or determination by the department, such a consultation, approval or determination is not necessary for remedial actions to meet the substantial equivalence requirement under this section; however, the remedial action must still be conducted substantially equivalent with the substantive requirements of those provisions. In applying these sections, reference should be made to the other applicable sections of this chapter, with particular attention to WAC 173-340-130 (Administrative principles), WAC 173-340-200 (Definitions), and WAC 173-340-210 (Usage).

(a) WAC 173-340-350 (Remedial investigation/feasibility study);

(b) WAC 173-340-355 (Development of cleanup action alternatives that include remediation levels);

(c) WAC 173-340-357 (Quantitative risk assessment of cleanup action alternatives);

(d) WAC 173-340-360 (Selection of cleanup actions);

(e) WAC 173-340-380 (Cleanup action plan);

(f) WAC 173-340-400 (Cleanup actions);

(g) WAC 173-340-410 (Compliance monitoring requirements);

(h) WAC 173-340-430 (Interim actions);

(i) WAC 173-340-440 (Institutional controls);

(j) WAC 173-340-450 (Releases from underground storage tanks);

(k) WAC 173-340-700 through 173-340-760 (Cleanup standards); and

(l) WAC 173-340-810 through 173-340-850 (General provisions).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-545, filed 2/12/01, effective 8/15/01.]

WAC 173-340-550 Payment of remedial action costs. (1) Policy. RCW 70.105D.050(3) requires that the state seek to recover the amounts spent by the department for investigative and remedial actions and orders. It is the department's intention to recover those costs which are reasonably attributable to individual sites. Timing of cost recovery for individual sites will be considered on a case-by-case basis, however, the department may demand, and generally requires, payment of costs as they are incurred.

(2) Costs. Each person who is liable under chapter 70.105D RCW is liable for remedial action costs incurred by the department. Remedial action costs are costs reasonably attributable to the site and may include costs of direct activities, support costs of direct activities, and interest charges for delayed payments. The department may send its request for payment to all potentially liable persons who are under an order or decree for the remedial action costs at the site. The department shall charge an hourly rate based on direct staff costs plus support costs. It is the department's intention that the resulting hourly rate charged be less than the hourly rate typically charged by a comparably sized consulting firm providing similar services. The department shall use the following formula for computing hourly rates:

Hourly Rate = DSC + DSC(ASCM) + DSC(PSCM), where:

DSC = Direct Staff Costs defined in (a) of this subsection.

ASCM = Agency Support Cost Multiplier defined in (b) of this subsection.

PSCM = Program Support Cost Multiplier defined in (c) of this subsection.

(a) Costs of direct activities are direct staff costs and other direct costs. Direct staff costs (DSC) are the costs of hours worked directly on a contaminated site, including salaries, retirement plan benefits, Social Security benefits, health care benefits, leave and holiday benefits, and other benefits required by law to be paid to, or on behalf of, employees. Other direct costs are costs incurred as a direct result of department staff working on a contaminated site including, for example, costs of: Travel related to the site, printing and publishing of documents about the site, purchase or rental of equipment used for the site, and contracted work for the site.

(b) Agency support costs are the costs of facilities, communications, personnel, fiscal, and other statewide and agency-wide services. The agency support cost multiplier (ASCM) used shall be the agency indirect rate approved by the agency's federal cognizant agency (which, as of July 1, 1993, was the United States Department of the Interior) for each fiscal year.

(c) Program support costs are the costs of administrative time spent by site managers and other staff who work directly on sites and a portion of the cost of management, clerical, policy, computer, financial, citizen technical advisor, and other support provided by other program staff to site managers and other staff who work directly on sites. Other activities of the toxics cleanup program not included in program support costs include, for example, community relations not related to a specific site, policy development, and a portion of the cost of nonsite management, clerical, policy, computer, financial, and other support staff. The program support cost multiplier (PSCM) used shall be calculated by dividing actual program support costs by the direct staff costs of all hours charged to site related work. This multiplier shall be evaluated at least biennially and any changes published in at least two publications of the *Site Register*. The calculation and source documents used in any revision shall be audited by either the state auditor's office or a private accounting firm. Audit results shall be available for public review. This multiplier shall not exceed 1.0 (one).

(3) Request for payment. When the department requests payment of remedial action costs it shall provide an itemized statement documenting the costs incurred.

(4) Interest charges. A charge of twelve percent interest (annual percentage rate, compounded monthly) shall accrue

on all remedial action costs not paid within ninety days of the billing date, or within another longer time period designated by the department.

(5) Natural resource damages. Nothing in this section shall affect the authority of the department and the office of attorney general to recover natural resource damages.

(6) Independent remedial actions.

(a) The department may collect, from persons requesting a site-specific technical consultation under WAC 173-340-515, the costs incurred by the department in providing such advice and assistance.

(b) For situations where the department has decided to collect its costs, a refundable deposit of a reasonable amount will be required. The department's hourly costs shall be determined based on the method in WAC 173-340-550(2).

(c) The department's Toxics Cleanup Program manager or designee may make a discretionary, nonappealable decision on whether a person is eligible for a waiver of fees based on that person's ability to pay.

(d) The department shall waive collection of its costs, where appropriate, in providing technical assistance in support of an appropriate level of public participation or where the department's time in responding to the request is de minimis.

(7) Prepayment of costs.

(a) Persons potentially liable under this chapter or seeking a prospective purchaser agreement may request the department's oversight of remedial actions through a prepayment agreement. The purpose of such an agreement is to enable department oversight of remedial actions at lower priority sites. The department shall make a determination that such an agreement is in the public interest. A prepayment agreement requires a person to pay the department's remedial action costs, in advance, allowing the department to increase staff for the unanticipated workload. Agreements may cover one or more facilities. Whether the department can respond favorably to a request for a prepayment agreement will depend, in part, on the department and attorney general receiving authorization for the staffing necessary to implement the agreement. Persons interested in such an agreement are encouraged to contact the department early on to informally discuss the potential for using such an agreement at a facility.

(b) Prepayment agreements do not replace an order or decree but are preliminary to or work in conjunction with such documents. Persons entering into a prepayment agreement shall enter into good faith negotiations on an agreed order or consent decree governing remedial actions at the facility in accordance with the procedures described in WAC 173-340-520(1) or 173-340-530(2). Failure to successfully conclude such negotiations may result in the department withdrawing from the prepayment agreement or initiating enforcement action.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-550, filed 2/12/01, effective 8/15/01. Statutory Authority: RCW 70.105D.030 (1)(f), 70.105D.040(2) and SB 5404. 93-24-064, § 173-340-550, filed 11/24/93, effective 12/25/93. Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-550, filed 4/3/90, effective 5/4/90.]

WAC 173-340-560 Mixed funding. (1) Introduction. Under RCW 70.105D.070 (2)(d)(xi), the department may provide public funds from the state toxics control account to a potentially liable person for the purpose of assisting with the payment of remedial action costs regardless of when incurred. This assistance can be provided in the form of a loan or a contribution, in cash or in kind. Any funding decision under this section is solely the responsibility of the director.

(2) Applicability and request.

(a) Mixed funding shall be provided only to potentially liable persons whom the department has found to be eligible and who have entered into a consent decree with the department under the requirements of this chapter.

(b) The consent decree shall identify remedial action tasks to be addressed by the mixed funding, costs to be borne by the potentially liable person, costs to be borne by the state toxics control account and terms of the agreement. In the case of loans, the consent decree shall also define any terms and conditions under which the potentially liable person receiving mixed funding has agreed to reimburse the state toxics control account.

(c) The potentially liable person shall submit sufficient documentation to support its request for mixed funding.

(3) Eligibility and mixed funding criteria. The director shall make a determination, based upon specific criteria whether a proposal is eligible for funding. The only circumstances under which mixed funding can be approved by the department are when the funding will achieve both:

(a) A substantially more expeditious or enhanced cleanup than would otherwise occur; and

(b) The prevention or mitigation of unfair economic hardship. In considering this criterion the department shall consider the extent to which mixed funding will either:

(i) Prevent or mitigate unfair economic hardship faced by the potentially liable person if the remedial action plan were to be implemented without public funding; or

(ii) Achieve greater fairness with respect to the payment of remedial action costs between the potentially liable person entering into a consent decree with the department and any nonsettling potentially liable persons.

(4) Funding decision. The department may have informal discussions on mixed funding. If a potentially liable person is found to be eligible for mixed funding, the director shall make a determination regarding the amount of funding to be provided, if any. This shall be determined at the discretion of the director and is not subject to review. A determination of eligibility is not a funding commitment. Actual funding will depend on the availability of funds.

(5) The department may recover the amount of public funding spent on investigations and remedial actions from potentially liable persons who have not entered into a consent decree under this chapter. For purposes of such cost recovery action, the amount in mixed funding attributed to the site shall be considered as remedial action costs paid by the department.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-560, filed 4/3/90, effective 5/4/90.]

PART VI—PUBLIC PARTICIPATION

WAC 173-340-600 Public notice and participation. (1) Purpose. Public participation is an integral part of the department's responsibilities under the Model Toxics Control Act. The department's goal is to provide the public with timely information and meaningful opportunities for participation that are commensurate with each site. The department will meet this goal through a public participation program that includes: The early planning and development of a site-specific public participation plan; the provision of public notices; a site register; public meetings or hearings; and the participation of regional citizens' advisory committees.

(2) Other requirements. In addition to the requirements in this section, other sections of this chapter contain specific notice requirements that must also be followed. See WAC 173-340-720 for notice requirements on an off-property conditional point of compliance and cleanup levels for ground water flowing into nearby surface water; WAC 173-340-545 for public notice requirements for private rights of action; WAC 173-340-440 for local government notification requirements for restrictive covenants; and WAC 173-340-310 for public notice requirements for emergency or interim actions required by the department as a result of an initial investigation.

(3) Criteria. In order to promote effective and meaningful public participation, the department may determine that public participation opportunities in addition to those specifically required by chapter 70.105D RCW, or this chapter, are appropriate and should be provided. In making this determination, the department may consider:

(a) Known or potential risks to human health and the environment that could be avoided or reduced by providing information to the public;

(b) Public concerns about the facility;

(c) The need to contact the public in order to gather information about the facility;

(d) The extent to which the public's opportunity to affect subsequent departmental decisions at the facility may be limited or foreclosed in the future;

(e) The need to prevent disclosure of confidential, unverified, or enforcement-sensitive information;

(f) The routine nature of the contemplated remedial action; and

(g) Any other factors as determined by the department.

(4) Public notice. Whenever public notice is required by chapter 70.105D RCW, the department shall, at a minimum, provide or require notice as described in this section except as specified for the biennial report in WAC 173-340-340.

(a) Request for notice. Notice shall be mailed to persons who have made a timely request. A request for notice is timely if received before or during the public comment period for the current phase of remedial action at the facility. However, the receipt of a request for notice shall not require the department to extend the comment period associated with the notice.

(b) Mail. Notice shall be mailed to persons who reside within the potentially affected vicinity of the proposed action. The potentially affected vicinity shall include all property within and contiguous to the site and any other area that the department determines to be directly affected by the proposed action.

(c) Newspaper publication. Notice of the proposed action shall be published in the newspaper of largest circulation in the city or county of the proposed action, by one or more of the following methods: Display ad; legal notice; or any other appropriate format, as determined by the department.

(d) Other news media. Notice of the proposed action shall be mailed to any other news media that the department determines to be appropriate. The department may consider how a medium compares with the newspaper of largest circulation in terms of: Audience reached; timeliness; adequacy in conveying the particular information in the notice; cost; or other relevant factors.

(e) Comment periods. All public notices shall indicate the public comment period on the proposed action. Unless stated otherwise, comment periods shall be for thirty days at a minimum. The department may extend the public comment period, as appropriate.

(f) Combining public comment requirements. Whenever reasonable, the department shall consolidate public notice and opportunities for public comment under this chapter with public notice and comment requirements under other laws and regulations.

(g) Site-specific risk assessment. For public notices describing cleanup plans that use site-specific risk assessment or would restrict future site or resource use, the public notice shall specifically identify the restrictions and invite comments on these elements of the cleanup plan. This notice shall also include a statement indicating the availability of public participation grants and of the department's Citizen Technical Advisor for providing technical assistance to citizens on site-specific risk assessment and other issues related to site remediation.

(5) Public meetings. During any comment period announced by a public notice issued under this chapter, if ten or more persons request a public meeting on the subject of the public notice, the department shall hold a public meeting for the purpose of receiving comments.

(6) Additional methods. In addition to "public notice" required by chapter 70.105D RCW, or this chapter, the department may use any of the following methods to provide information to the public:

(a) Press releases;

(b) Fact sheets;

(c) Public meetings;

(d) Publications;

(e) Personal contact by department employees;

(f) Posting signs at the facility;

(g) Notice in the *Site Register*;

(h) Notice through the Internet;

(i) Any other methods as determined by the department.

(7) *Site Register.* The department shall regularly publish, make available electronically, and maintain a publication called the *Site Register*, which provides notice of the following:

(a) Determinations of no further action under WAC 173-340-320;

(b) Results of site hazard rankings;

(c) Availability of annual and biennial reports;

(d) Issuance of enforcement orders, agreed orders, or proposed consent decrees;

(e) Public meetings or hearings;

(f) Scoping notice of department-conducted remedial investigation/feasibility study;

(g) Availability of remedial investigation/feasibility study reports and draft and final cleanup plans;

(h) Change in site status or placing sites on or removing sites from the hazardous sites list under WAC 173-340-330;

(i) Availability of engineering design reports under WAC 173-340-400;

(j) Schedules developed under WAC 173-340-140;

(k) Reports of independent cleanup actions received under WAC 173-340-300;

(l) Beginning of negotiations or discussions under WAC 173-340-520 and 173-340-530;

(m) Deadline extensions or missed deadlines under WAC 173-340-140;

(n) A summary of any notices received under WAC 173-340-545 for cleanup actions and interim actions being conducted where a private right of action is anticipated;

(o) A list of available department publications, including guidance, technical reports and policies pertinent to remedial actions;

(p) The results of department review of reports on independent remedial actions submitted under WAC 173-340-515; and

(q) Any other notice that the department considers appropriate for inclusion.

(8) Evaluation. As part of requiring or conducting a remedial action at any facility, the department shall evaluate public participation needs at the facility. The evaluation shall include an identification of the potentially affected vicinity for the remedial action. For sites where site-specific risk assessment is used, the department shall also evaluate public interest in the site, significant public concerns regarding future site use, and public values to be addressed through the public participation plan.

(9) Public participation plans.

(a) Scope. The public participation plans required by this section are intended to encourage a coordinated and effective public involvement tailored to the public's needs at a particular facility. The scope of a plan shall be commensurate with the nature of the proposed remedial actions; the level of public concern; and the risks posed by the facility.

(b) Early planning encouraged. In order to develop an appropriate plan, the department or potentially liable person (if submitting a plan to the department) should engage in an early planning process to assess the public participation needs at the facility. This process may include identifying and conferring with individuals, community groups, local governments, tribes, public agencies, or any other organizations that may have an interest in or knowledge of the facility.

(c) Plan development. The department shall develop the plan, or work with the potentially liable person to develop the plan. If a plan already exists for a facility, the department shall consider whether the existing plan is still appropriate or whether the plan should be amended. For example, a plan originally developed to address a remedial investigation/feasibility study may need to be amended to address implementation phases.

(d) Plans required. As part of requiring or conducting a remedial action, except emergency actions, at any site that has been assigned a hazard ranking score, the department shall ensure that a public participation plan is developed and implemented. The department may also require the development of a public participation plan as part of an agreed order (see WAC 173-340-530) or consent decree (see WAC 173-340-520) for facilities that have not been assigned a hazard ranking score.

(e) If the variables proposed to be modified in a site-specific risk assessment or alternative reasonable maximum exposure scenario may affect the significant public concerns regarding future land uses and exposure scenarios, then the department shall assure appropriate public involvement and comment opportunities will occur as identified in the public participation plan.

(f) Plan as part of order or decree. A potentially liable person will ordinarily be required to submit a proposed public participation plan as part of its request for an agreed order or a consent decree. If a plan already exists for the facility, the potentially liable person may either resubmit the existing plan with any proposed amendments or submit an entirely new proposed plan. The proposed plan may be revised during the course of discussions or negotiations on the agreed order (see WAC 173-340-530) or consent decree (see WAC 173-340-520).

The final public participation plan may become part of the agreed order or consent decree.

(g) Contents. The public participation plan shall include the following:

(i) Applicable public notice requirements and how these will be met, including: When public notice will occur; the length of the comment periods accompanying each notice; the potentially affected vicinity and any other areas to be provided notice, to the extent known.

(ii) Information repositories. The plan should identify at least one location where the public can review information about the remedial action. Multiple locations may be appropriate.

(iii) Methods of identifying the public's concerns. Such methods may include: Interviews; questionnaires; meetings; contacts with community groups or other organizations that have an interest in the site; establishing citizen advisory groups for sites; or obtaining advice from the appropriate regional citizens' advisory committee.

(iv) Methods of addressing the public's concerns and conveying information to the public. These may include any of the methods listed in subsection (6) of this section.

(v) Coordination of public participation requirements. The plan should identify any public participation requirements of other applicable federal, state or local laws, and address how such requirements can be coordinated. For example, if Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) applies to the proposed action, the plan should explain how CERCLA and this chapter's public comment periods will be coordinated.

(vi) Amendments to the plan. The plan should outline the process for amending the plan. Any amendments must be approved by the department.

(vii) Citizen technical advisor: A statement indicating the availability of the department's citizen technical advisor for providing technical assistance to citizens on issues related to the investigation and cleanup of the site.

(viii) Any other elements that the department determines to be appropriate for inclusion in the final public participation plan.

(h) Implementation. The department shall retain approval authority over the actions taken by a potentially liable person to implement the plan.

(10) Consent decrees. In addition to any other applicable public participation requirements, the following shall be required for consent decrees.

(a) Public participation plan. A plan meeting the requirements of subsection (9) of this section shall be developed when required by subsection (9)(d) of this section.

(b) Notice of negotiations. When the department decides to proceed with negotiations it shall place a notice in the *Site Register* advising the public that negotiations have begun. This notice shall include the name of the facility, a general description of the subject of the consent decree and the deadlines for negotiations.

(c) Notice of proposed decree. The department shall provide or require public notice of proposed consent decree. The notice may be combined with notice of other documents under this chapter, such as a cleanup action plan, or under other laws. The notice shall briefly:

(i) Identify and generally describe the facility;

(ii) Identify the person(s) who are parties to the consent decree;

(iii) Generally describe the remedial action proposed in the proposed consent decree, including institutional controls and permit exemptions authorized under RCW 70.105D.090;

(iv) Indicate the date, place, and time of the public hearing on the proposed consent decree. Where a public hearing is not planned, indicate that a public hearing will only be held if at least ten persons request one and the procedures for requesting a public hearing; and

(v) Invite the public to comment at the public hearing (if applicable) or in writing. The public comment period shall run for at least thirty days from the date of the issuance of the notice.

(d) Public hearing. The department shall hold a public hearing on the proposed consent decree for the purpose of providing the public with an opportunity to comment whenever ten or more persons request a public hearing or whenever the department determines a public hearing is necessary.

(e) Revisions. If the state and the potentially liable person agree to substantial changes to the proposed consent decree, the department shall provide additional public notice and opportunity to comment.

(f) Extensions. The department shall publish in the next *Site Register* the extension of deadlines for designated high priority sites.

(11) Agreed orders. In addition to any other applicable public participation requirements, the following shall be required for agreed orders under WAC 173-340-530.

(a) Public participation plan. A plan meeting the requirements of subsection (9) of this section shall be developed when required by subsection (9)(d) of this section.

(b) Notice of discussions. When the department decides to proceed with discussions it shall place a notice in the *Site Register* advising the public that discussions have commenced. This notice shall include the name of the facility, a general description of the subject of the order and the deadlines for discussions.

(c) Notice of agreed orders. Public notice shall be provided by the department for any agreed order. For all agreed orders, notice shall be mailed no later than three days after the issuance of the agreed order. For all agreed orders, the comment period shall be at least thirty days. The agreed order may be effective before the comment period is over, unless the department determines it is in the public interest to complete the public comment period before the effective date of the agreed order. The department may determine that it is in the public interest to provide public notice before the effective date of any agreed order or to hold a public meeting or hearing on the agreed order. Notice of agreed orders shall briefly:

(i) Identify and generally describe the facility;

(ii) Identify the person(s) who are parties to the agreed order;

(iii) Generally describe the remedial action proposed in the proposed agreed order, including institutional controls and permit exemptions authorized under RCW 70.105D.090; and

(iv) Invite the public to comment on the proposed agreed order.

(d) Revisions. If the department and the potentially liable person agree to substantial changes to the proposed agreed order, the department shall provide additional public notice and opportunity to comment.

(e) Extensions. The department shall publish in the next *Site Register* the extension of deadlines for designated high priority sites.

(12) Enforcement orders. In addition to any other applicable public participation requirements, the department shall provide public notice of all enforcement orders. Except in the case of emergencies, notice shall be mailed no later than three days after the date of the issuance of the order. In emergencies, notice shall be mailed no later than ten days after the issuance of the order.

(a) Contents of notice. All notices shall briefly:

(i) Identify and generally describe the facility;

(ii) Identify the person(s) who are parties to the order;

(iii) Generally describe the terms of the proposed order, including institutional controls and permit exemptions authorized under RCW 70.105D.090; and

(iv) Invite the public to comment on the proposed order.

(b) The department may amend the order on the basis of public comments. The department shall provide additional public notice and opportunity to comment if the order is substantially changed.

(13) Remedial investigation/feasibility study. In addition to any other applicable public participation requirements, the following shall be required during a remedial investigation/feasibility study.

(a) Scoping. When the department elects to perform a remedial investigation/feasibility study, the department shall provide public notice and an opportunity to comment on the scope of the remedial investigation/feasibility study.

(b) Extensions. The department shall publish in the next *Site Register* the extension of deadlines for designated high priority sites.

(c) Report. The department shall provide or require public notice of remedial investigation/feasibility study reports prepared under WAC 173-340-350. This public notice may be combined with public notice of the draft cleanup action plan. At a minimum, public notice shall briefly:

(i) Describe the site and remedial investigation/feasibility study results;

(ii) If available, identify the department's proposed cleanup action and provide an explanation for its selection;

(iii) Invite public comment on the report. The public comment period shall extend for at least thirty days from the date of mailing of the notice.

(14) Selection of cleanup actions. In addition to any other applicable public participation requirements, the department shall:

(a) Provide a notice of availability of draft or final cleanup action plans and a brief description of the proposed or selected alternative in the *Site Register*;

(b) Provide public notice of the draft cleanup action plan. A notice of a draft cleanup plan may be combined with notice on the remedial investigation/feasibility study. Notice of a draft cleanup action plan may be combined with notice on a draft consent decree or on an order. At a minimum, public notice shall briefly:

(i) Describe the site;

(ii) Identify the department's proposed cleanup action and provide an explanation for its selection;

(iii) Invite public comment on the draft cleanup action plan. The public comment period shall run for at least thirty days from the date of publication of the public notice.

(c) Whenever the cleanup action plan proposes a restrictive covenant as part of the draft cleanup plan, provide notice to and seek comments from the city or county department with land use planning authority for real property subject to the restrictive covenant. The purpose of this notification is to solicit comment on whether the proposed restrictive covenant is consistent with any current or proposed land use plans.

(15) Cleanup action implementation. In addition to any other applicable public participation requirements, the following shall be required during cleanup action implementation.

(a) Public notice and opportunity to comment on any plans prepared under WAC 173-340-400 that represent a substantial change from the cleanup action plan.

(b) When the department conducts a cleanup action, public notice and an opportunity to comment shall be provided on the engineering design report and notice shall be given in the *Site Register*.

(16) Routine cleanup and interim actions. In addition to any other applicable public participation requirements, the following will be required for routine cleanup actions and interim actions.

(a) Public notice shall be provided for any proposed routine cleanup or interim actions. This public notice shall be combined with public notice of an order or settlement whenever practicable.

(b) At a minimum, public notice shall briefly:

(i) Describe the site;

(ii) Identify the proposed action, including institutional controls and the permit exemptions authorized under RCW 70.105D.090;

(iii) Identify the likely or planned schedule for the action;

(iv) Reference any planning documents prepared for the action;

(v) Identify department staff who may be contacted for further information; and

(vi) Invite public comment on the routine cleanup or interim action. The public comment period shall extend for at least thirty days from the date of the mailing of notice.

(17) Public participation grants. RCW 70.105D.070(4) requires funds be allocated for public participation grants to persons, including groups who may be adversely affected by a release or threatened release of a hazardous substance. Persons interested in applying for such grants are encouraged to contact the department to learn about available funding, grant application procedures and deadlines. See chapter 173-321 WAC for additional information on public participation grants.

(18) Technical assistance. There is created within the department a citizen technical advisor office to provide independent technical assistance to citizens concerning the Model Toxics Control Act and remedial actions occurring under the act. This office will be established upon the effective date of this rule revision and continue for three years. Before the end of the three-year period, the department will work with citizen and business representatives to evaluate the effectiveness of this office and to determine whether the office should continue. The costs of this office shall be recovered by the department as provided for in WAC 173-340-550.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-600, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-600, filed 4/3/90, effective 5/4/90.]

WAC 173-340-610 Regional citizens' advisory committees. (1) The department shall establish regional citizens' advisory committees as part of a public participation program. The regional citizens' advisory committees are intended to promote meaningful and effective public involvement in the department's remedial action program under chapter 70.105D RCW. The committees will advise the department as to the concerns of citizens locally and regionally regarding the remedial actions within each committee's region, with emphasis on issues that affect the region as a whole, rather than site-specific concerns.

(2) Location. There shall be a regional citizens' advisory committee representing each geographic region of the state served by a regional office of the department.

(3) Membership. At any time, each committee shall have no fewer than five and no more than twelve members. The director shall, no later than July 1, 1990, appoint five members to each committee to represent citizens' interests in the

region. These members shall serve three-year terms that may be renewed at the director's discretion. These members should represent citizen interests in the region.

(a) The director may appoint up to seven additional members to represent communities that may be affected by the remedial actions within each region. These members shall serve two-year terms that may be renewed at the director's discretion.

(b) At no time shall more than twenty-five percent of the membership of any committee consist of persons who are elected or appointed public officials or their representatives.

(c) The department shall advise the public as to whether any vacancies exist on the committees, and shall accept applications from interested citizens.

(d) The following persons shall not be eligible to serve on any committee:

(i) Persons whom the department has found are potentially liable persons under WAC 173-340-500 with regard to any facility that is currently the subject of department investigative, remedial or enforcement actions, not including compliance monitoring;

(ii) Agents or employees of such potentially liable persons as described in (d)(i) of this subsection; and

(iii) Agents or employees of the department.

(e) A member shall refrain from participating in a committee matter if that member for any reason cannot act fairly and in the public interest with regard to that matter.

(f) The director may dismiss a member for cause in accordance with the terms of the regional citizens' advisory committee charter.

(4) Meetings. The committees shall meet at least twice a year at the regional offices or elsewhere as agreed upon by a committee and the department. Appropriate department staff may attend these meetings. The department shall brief the committees on the program's major planned and ongoing activities for the year.

(a) The department and the committees may agree to additional meetings.

(b) Each committee will designate one of its members to serve as chair. The committee chairs shall meet every year with the program manager or his/her designee.

(c) All committee meetings shall be open to the public. The department shall inform the public of committee meetings.

(5) Resources allocated to the committees.

(a) The department shall determine, after consulting with the committees, the amount of staff time and other department resources that shall be available to the committees for each biennium.

(b) The department shall designate staff to work with the committees.

(c) Members shall be reimbursed for travel expenses (as provided for in chapter 43.03 RCW) for any meetings approved by the department.

(6) Responsibilities. The committees are directed to:

(a) Meet at least twice annually;

(b) Inform citizens within each region as to the existence of the committees and their availability as a resource;

(c) Review the department's biennial program priorities, and advise the department of citizen concerns regarding the program priorities;

(d) Advise the department of community concerns about the cleanup program's activities and develop proposals for addressing these concerns. Committees may use issues at specific sites as a foundation for understanding regional issues;

(e) Annually prepare a brief report to the department describing:

(i) Major citizen concerns that have been brought to the committee's attention during the past year;

(ii) Any committee proposals or recommendations to address these concerns;

(iii) The committee's plans for the coming year; and

(iv) Any other information or issues which the committee believes appropriate for inclusion.

(f) The committees are encouraged to work with the department and the public to develop additional committee goals or responsibilities.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-610, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-610, filed 4/3/90, effective 5/4/90.]

PART VII—CLEANUP STANDARDS

WAC 173-340-700 Overview of cleanup standards.

(1) **Purpose.** This section provides an overview of the methods for establishing cleanup standards that apply to a release or threatened release of a hazardous substance at a site. If there are any inconsistencies between this section and any specifically referenced section, the referenced section shall govern.

(2) **Explanation of term "cleanup level."** A cleanup level is the concentration of a hazardous substance in soil, water, air or sediment that is determined to be protective of human health and the environment under specified exposure conditions. Cleanup levels, in combination with points of compliance, typically define the area or volume of soil, water, air or sediment at a site that must be addressed by the cleanup action.

(3) **Explanation of term "cleanup standards."** Cleanup standards consist of the following:

(a) Cleanup levels for hazardous substances present at the site;

(b) The location where these cleanup levels must be met (point of compliance); and

(c) Other regulatory requirements that apply to the site because of the type of action and/or location of the site ("applicable state and federal laws").

(4) **Relationship between cleanup standards and cleanup actions.**

(a) Cleanup standards are identified for the particular hazardous substances at a site and the specific areas or pathways, such as land or water, where humans and the environment can become exposed to these substances. This part provides uniform methods statewide for identifying cleanup standards and requires that all cleanups under the act meet these standards. The actual degree of cleanup may vary from site to site and will be determined by the cleanup action alter-

native selected under WAC 173-340-350 through 173-340-390.

(b) For most sites, there are several cleanup technologies or combinations of cleanup technologies ("cleanup action alternatives") that may be used to comply with cleanup standards at individual sites. Other parts of this rule govern the process for planning and deciding on the cleanup action to be taken at a site. This may include establishing "remediation levels," or the concentrations of hazardous substances above which a particular cleanup technology will be applied. See WAC 173-340-350 through 173-340-390. WAC 173-340-355 contains detailed information on establishing remediation levels. WAC 173-340-410 specifies the monitoring required to ensure that the remedy is effective.

(c) Where a cleanup action involves containment of soils with hazardous substances above cleanup levels, the cleanup action may be determined to comply with cleanup standards, provided the compliance monitoring program is designed to ensure the long-term integrity of the containment system, and the other requirements for containment in this chapter are met.

(5) **Methods for setting cleanup levels.** The first step in setting cleanup levels is to identify the nature of the contamination, the potentially contaminated media, the current and potential pathways of exposure, the current and potential receptors, and the current and potential land and resource uses. A conceptual site model may be developed as part of this scoping process. Cleanup levels may then be established for each media. Both the conceptual site model and cleanup levels may be refined as additional information is collected during the remedial investigation/feasibility study. See WAC 173-340-708(3) for additional information on how to determine current and potential future land and resource uses for the conceptual site model. These rules provide three approaches for establishing cleanup levels:

(a) **Method A: ARARs and Tables.** On some sites, the cleanup action may be routine (WAC 173-340-200) or may involve relatively few hazardous substances. Under Method A, cleanup levels at these sites are set at concentrations at least as stringent as concentrations specified in applicable state and federal laws (ARARs) and Tables 720-1, 740-1, and 745-1 of this chapter.

Method A cleanup levels for hazardous substances that are deemed indicator hazardous substances at the site under WAC 173-340-708(2) and are not addressed under applicable state and federal laws or Tables 720-1, 740-1, and 745-1 must be established at concentrations which do not exceed the natural background concentration or the practical quantitation limit, whichever is higher.

For soil contamination, the potential impact of hazardous substances on terrestrial ecological receptors must be evaluated under WAC 173-340-7490 through 173-340-7494. Specifically, either an exclusion must be established for the site under WAC 173-340-7491 or a terrestrial ecological evaluation must be conducted under WAC 173-340-7492 or 173-340-7493. The terrestrial ecological evaluation may result in a more stringent Method A soil cleanup level than is required to protect human health.

Except where institutional controls are required by WAC 173-340-440(4), site cleanups that achieve Method A cleanup levels may be used without future restrictions on the property due to residual levels of contamination.

(b) **Method B: Universal method.** Method B is the universal method for determining cleanup levels for all media at all sites. Under Method B, cleanup levels for individual hazardous substances are established using applicable state and federal laws and the risk equations and other requirements specified in WAC 173-340-720 through 173-340-760.

Method B is divided into two tiers: Standard and modified. Standard Method B uses generic default assumptions to calculate cleanup levels. Modified Method B provides for the use of chemical-specific or site-specific information to change selected default assumptions, within the limitations allowed in WAC 173-340-708. Modified Method B may be used to establish cleanup levels.

Modified Method B may also be used in a quantitative risk assessment to help assess the protectiveness of a remedy by modifying input parameters as described in WAC 173-340-720 through 173-340-750 or by using other modifications that meet the requirements of WAC 173-340-702 and 173-340-708. See WAC 173-340-355 and 173-340-357 for more information on remediation levels and quantitative risk assessment.

For individual carcinogens, both standard and modified Method B cleanup levels are based upon the upper bound of the estimated excess lifetime cancer risk of one in one million (1×10^{-6}).

For individual noncarcinogenic substances, both standard and modified Method B cleanup levels are set at concentrations which are anticipated to result in no acute or chronic toxic effects on human health (that is, hazard quotient of one (1) or less) and no significant adverse effects on the propagation of aquatic and terrestrial organisms.

Where a hazardous waste site involves multiple hazardous substances and/or multiple pathways of exposure, then standard and modified Method B cleanup levels for individual substances must be adjusted downward for additive health effects in accordance with the procedures in WAC 173-340-708 if the total excess lifetime cancer risk for a site exceeds one in one hundred thousand (1×10^{-5}) or the hazard index for substances with similar noncarcinogenic toxic effects exceeds one (1).

For soil contamination, the potential impact of hazardous substances on terrestrial ecological receptors must be evaluated under WAC 173-340-7490 through 173-340-7494. Specifically, either an exclusion must be established for the site under WAC 173-340-7491 or a terrestrial ecological evaluation must be conducted under WAC 173-340-7492 or 173-340-7493. The terrestrial ecological evaluation may result in a more stringent Method B soil cleanup level for the site than is required to protect human health.

Except where institutional controls are required by WAC 173-340-440(4), site cleanups that achieve Method B cleanup levels may be used without future restrictions on the property due to residual levels of contamination.

(c) **Method C: Conditional method.** Compliance with cleanup levels developed under Method A or B may be impossible to achieve or may cause greater environmental harm. In those situations, Method C cleanup levels for individual hazardous substances may be established for surface

water, ground water, and air. Method C industrial soil and air cleanup levels may also be established at industrial properties that meet the criteria in WAC 173-340-745.

Under Method C, cleanup levels for individual hazardous substances are established using applicable state and federal laws and the risk equations and other requirements specified in WAC 173-340-720 through 173-340-760. Method C is divided into two tiers: Standard and modified. Standard Method C uses generic default assumptions to calculate cleanup levels. Modified Method C provides for the use of chemical-specific or site-specific information to change selected default assumptions, within the limitations allowed in WAC 173-340-708. Modified Method C may be used to establish cleanup levels.

Modified Method C may also be used in a quantitative risk assessment to help assess the protectiveness of a remedy by modifying input parameters as described in WAC 173-340-720 through 173-340-750 or by using other modifications that meet the requirements of WAC 173-340-702 and 173-340-708. See WAC 173-340-355 and 173-340-357 for more information on remediation levels and quantitative risk assessment.

For individual carcinogens, both standard and modified Method C cleanup levels are based upon the upper bound of the estimated lifetime cancer risk of one in one hundred thousand (1×10^{-5}).

For individual noncarcinogenic substances, both standard and modified Method C cleanup levels are set at concentrations which are anticipated to result in no acute or chronic toxic effects on human health (that is, hazard quotient of one (1) or less) and no significant adverse effects on the protection and propagation of aquatic and terrestrial organisms.

Where a hazardous waste site involves multiple hazardous substances and/or multiple pathways of exposure, then both standard and modified Method C cleanup levels for individual substances must be adjusted downward for additive health effects in accordance with the procedures in WAC 173-340-708 if the total excess lifetime cancer risk for a site exceeds one in one hundred thousand (1×10^{-5}) or the hazard index for substances with similar noncarcinogenic toxic effects exceeds one (1).

For soil contamination, the potential impact of hazardous substances on terrestrial ecological receptors must be evaluated under WAC 173-340-7490 through 173-340-7494. Specifically, either an exclusion must be established for the site under WAC 173-340-7491 or a terrestrial ecological evaluation must be conducted under WAC 173-340-7492 or 173-340-7493. The terrestrial ecological evaluation may result in a more stringent Method C soil cleanup level for the site than is required to protect human health.

Site cleanups establishing Method C cleanup levels must have restrictions placed on the property (institutional controls) to ensure future protection of human health and the environment.

(6) **Requirements for setting cleanup levels.** Several requirements apply to cleanups under any of the three methods. Some of these requirements, such as the identification of applicable state and federal laws, describe analyses used along with Methods A, B or C in order to set cleanup levels for particular substances at a site. Others describe the technical procedures to be used.

(a) **Applicable state and federal laws.** RCW 70.105D.-030 (2)(d) requires the cleanup standards in these rules to be "at least as stringent as all applicable state and federal laws." In addition to establishing minimum requirements for cleanup standards, applicable state and federal laws may also impose certain technical and procedural requirements for performing cleanup actions. These requirements are described in WAC 173-340-710 and are similar to the "ARAR" (applicable, relevant and appropriate requirements) approach of the federal superfund law. Sites that are cleaned up under an order or decree may be exempt from obtaining a permit under certain other laws but they must still meet the substantive requirements of these other laws. (See WAC 173-340-710(9).)

(b) **Cross-media contamination.** In some situations, migration of hazardous substances from one medium may cause contamination in a second media. For example, the release of hazardous substances in soil may cause ground water contamination. Under Methods A, B, and C, cleanup levels must be established at concentrations that prevent violations of cleanup levels for other media.

(c) **Risk assessment procedures.** The analyses performed under Methods B and C use several default assumptions for defining cleanup levels for carcinogens and noncarcinogens. The individual default assumptions and procedures for modifying these assumptions based on site-specific information are specified in WAC 173-340-708 and 173-340-720 through 173-340-750. WAC 173-340-708 also provides rules for use of indicator hazardous substances. The standards for review of new scientific information are described in WAC 173-340-702 (14), (15) and (16).

(d) **Natural background and analytical considerations.** In some cases, cleanup levels calculated using the methods specified in this chapter are less than natural background levels or levels that can be reliably measured. In those situations, the cleanup level shall be established at a concentration equal to the practical quantitation limit or natural background concentration, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional information.

(7) **Procedures for demonstrating compliance with cleanup standards.** Setting cleanup standards also involves being able to demonstrate that they have been met. This involves specifying where on the site the cleanup levels must be met ("points of compliance"), how long it takes for a site to meet cleanup levels ("restoration time frame"), and conducting sufficient monitoring to demonstrate that the cleanup standards have been met and will continue to be met in the future. The provisions for establishing points of compliance are in WAC 173-340-720 through 173-340-750. The provisions for establishing restoration time frames are in WAC 173-340-360. The compliance monitoring plan prepared under WAC 173-340-410 specifies precisely how these are measured for each site. At sites where remediation levels are used, the compliance monitoring plan will also need to describe the performance monitoring to be conducted to demonstrate the remediation levels have been achieved.

(8) **Specific procedures for setting cleanup levels at petroleum contaminated sites.** In addition to the other requirements in this section, this chapter provides for the following specific procedures to establish cleanup levels at sites where there has been a release of total petroleum hydrocarbons (TPH) and hazardous substances associated with a release of TPH.

(a) For soil contamination, the potential impact of TPH on terrestrial ecological receptors must be evaluated under WAC 173-340-7490 through 173-340-7494. Specifically, either an exclusion must be established for the site under WAC 173-340-7491 or a terrestrial ecological evaluation must be conducted under WAC 173-340-7492 or 173-340-7493. The terrestrial ecological evaluation may result in a more stringent soil cleanup level than is required to protect human health.

(b) It is necessary to analyze for and evaluate certain carcinogenic and noncarcinogenic hazardous substances that may be associated with a release of TPH. These are identified in Table 830-1. In cases where the cleanup level for one or more of these associated hazardous substances is exceeded but the TPH cleanup level is not, the cleanup level shall be based on the associated hazardous substance.

(i) **Method A.** Method A may be used to establish cleanup levels for TPH and associated hazardous substances at qualifying sites (see WAC 173-340-704). At these sites, the presence, location and concentration of TPH may be established by using the NWTPH method described under Method 6 (see WAC 173-340-830 (3)(a)(vi)). The NWTPH method is a simplified, and relatively inexpensive, analytical method for evaluating TPH. Method A cleanup levels have been determined for four common petroleum mixtures: Gasoline range organics (GRO), diesel range organics (DRO), heavy oils, and electrical insulating mineral oil, as well as many hazardous substances that may be associated with the TPH. A site owner may decide to use Method A for some substances or media and Method B or C for others, depending upon site conditions and qualifications.

(ii) **Method B and Method C tiered approach.** This chapter provides for a three-tiered approach for establishing Method B and Method C cleanup levels at sites that involve a release of TPH. These tiers are not required to be approached sequentially (that is, the process may be started at any tier). The tiered process allows one to calculate different cleanup levels for TPH and associated hazardous substances using progressively more complex and site-specific information, and also allows for basing the cleanup levels on the presence or absence of exposure pathways, determined as part of the conceptual site model. In establishing a TPH cleanup level using the tiered process, it is still necessary to comply with other requirements and procedures under WAC 173-340-700 through 173-340-750.

(A) **Conceptual site model.** The first step in setting Method B or C cleanup levels for TPH is to identify the nature of the contamination, the potentially contaminated media, the current and potential pathways of exposure, the current and potential receptors, and the current and potential land and resource uses. A conceptual site model should be developed as part of this scoping process. See WAC 173-340-708(3) for additional information on how to determine current and potential future land and resource uses for the conceptual site model.

(B) **General description of the three tiers.**

(I) Tier 1 consists of the standard Method B and Method C formulas and requirements under WAC 173-340-720 through 173-340-750 for each applicable pathway identified by the conceptual site model, including specific requirements set forth in those sections for petroleum mixtures.

(II) Tier 2 consists of the site-specific use of modified Method B and Method C formulas and requirements under WAC 173-340-720 through 173-340-750 for each applicable exposure pathway identified by the conceptual site model; and inclusion and development of additional, site-specific exposure pathways not addressed in Method A or Tier 1.

(III) Tier 3 consists of the site-specific use of standard or modified Method B and Method C formulas and requirements for each applicable exposure pathway identified by the conceptual site model and the use of new scientific information to establish a cleanup level as provided under WAC 173-340-702 (14), (15) and (16). It is considered a more complex evaluation in terms of technical sophistication (such as the use of new fate and transport models), data needs, cost and time.

(IV) A single tier may be used for all exposure pathways or more than one tier may be used when there are multiple exposure pathways.

(C) **Fractionated approach.** Method B and Method C cleanup levels for TPH are determined using the fractionated analytical approach for petroleum as described under Method 6 (see WAC 173-340-830 (3)(a)(vi)). This approach divides the TPH mixture into equivalent carbon numbers. Use of the fractionated approach requires testing or knowledge to define product composition as described under subsection (8)(b)(ii)(D) of this section ("Determination of product composition"). Cleanup levels are then calculated using reference doses that have been determined by the department for each fraction. Cleanup levels also need to consider the measured or predicted ability of the fractions to migrate from one medium to other media. Where multiple pathways of exposure for a particular medium are identified in the conceptual site model, the most stringent of the concentrations calculated for the various pathways becomes the cleanup level. For example, for soil contamination, if the direct contact and leaching pathways are potential exposure pathways, then a soil concentration would be calculated for each pathway and the lowest calculated concentration would become the cleanup level.

(D) **Determination of product composition.** Product composition may be determined by analyzing each sample in accordance with the VPH/EPH method described under Method 6 (see WAC 173-340-830 (3)(a)(vi)). Alternatively, product composition may be determined by one of the following methods:

(I) Correlation. Where WTPH or NWTPH methods described in Method 6 are used to collect and analyze the presence, location and concentration of TPH, knowledge of the fraction-specific composition of the petroleum released at the site may be based on analysis and correlation of a portion of the site samples with both the VPH/EPH and WTPH/NWTPH methods.

(II) Retrofitting. Where WTPH or NWTPH methods were used to collect and analyze the presence, location and concentration of TPH before the effective date of this provision, knowledge of the fraction-specific composition of the petroleum released at the site may be based on the fraction-specific composition assumptions used by the department to calculate Method A cleanup levels, which the department shall publish in guidance. If the identity of the petroleum product released at the site is not known, or is a mixture of products, retrofitting under this provision shall be based on the composition that yields the lowest TPH cleanup level.

(E) **Consultation with the department.** Because of the complexity of the development of site-specific Method B and Method C petroleum cleanup levels using the second or third tiers described above, or the use of correlated or retrofitted data, persons planning on using these methods are encouraged to contact the department to obtain appropriate technical guidance.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-700, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-700, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-700, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-700, filed 4/3/90, effective 5/4/90.]

WAC 173-340-702 General policies. (1) **Purpose.** This section defines the general policies and principles that shall be followed when establishing and implementing cleanup standards. This section shall be used in combination with other sections of this chapter.

(2) **Policy on expediting cleanups.** Establishing cleanup standards and selecting an appropriate cleanup action involves many technical and public policy decisions. This chapter is intended to constrain the range of decisions made on individual sites to promote expeditious cleanups.

(3) **Goal for cleanups.** The Model Toxics Control Act contains policies that state, in part, each person has a fundamental and inalienable right to a healthful environment and it is essential that sites be cleaned up well. Consistent with these policies, cleanup standards and cleanup actions selected under this chapter shall be established that provide conservative estimates of human health and environmental risks that protect susceptible individuals as well as the general population.

(4) **Current and potential site and resource uses.** Cleanup standards and cleanup actions selected under this chapter shall be established that protect human health and the environment for current and potential future site and resource uses.

(5) **Presumption for cleanup actions.** Cleanup actions that achieve cleanup levels at the applicable point of compliance under Methods A, B, or C (as applicable) and comply with applicable state and federal laws shall be presumed to be protective of human health and the environment.

(6) **Cost considerations.** Except as provided for in applicable state and federal laws, cost shall not be a factor in determining what cleanup level is protective of human health and the environment. In addition, where specifically provided for in this chapter, cost may be appropriate for certain other determinations related to cleanup standards such as point of compliance. Cost shall, however, be considered when selecting an appropriate cleanup action.

(7) **Cleanup action alternatives.** At most sites, there is more than one hazardous substance and more than one pathway for hazardous substances to get into the environment. For many sites there is more than one method of cleanup (cleanup action component) that could address each of these. When evaluating cleanup action alternatives it is appropriate to consider a representative range of cleanup action components that could address each of these as well as different combinations of these components to accomplish the overall site cleanup.

(8) **Cross-media impacts.** The cleanup of a particular medium at a site will often affect other media at the site. These cross-media impacts shall be considered when establishing cleanup standards and selecting a cleanup action. Cleanup actions conducted under this chapter shall use appropriate engineering controls or other measures to minimize these cross-media impacts.

(9) **Relationship between cleanup levels and cleanup actions.** In general, cleanup levels must be met throughout a site before the site will be considered clean. A cleanup action that leaves hazardous substances on a site in excess of cleanup levels may be acceptable as long as the cleanup action complies with WAC 173-340-350 through 173-340-390. However, these rules are intended to promote thorough cleanups rather than long-term partial cleanups or containment measures.

(10) **Relationship to federal cleanup law.** When evaluating cleanup actions performed under the federal cleanup law, the department shall consider WAC 173-340-350, 173-340-355, 173-340-357, 173-340-360, 173-340-410, 173-340-420, 173-340-440, 173-340-450, 173-340-700 through 173-340-760, and 173-340-830 to be legally applicable requirements under Section 121(d) of the Federal Cleanup Law.

(11) **Reviewing and updating cleanup standards.** The department shall review and, as appropriate, update WAC 173-340-700 through 173-340-760 at least once every five years.

(12) **Applicability of new cleanup levels.**

(a) For cleanup actions conducted by the department, or under an order or decree, the department shall determine the cleanup level that applies to a release based on the rules in effect under this chapter at the time the department issues a final cleanup action plan for that release.

(b) In reviewing the adequacy of independent remedial actions, the department shall determine the cleanup level that applies to a release based on the rules in effect at the time the final cleanup action for that release began or in effect when the department reviews the cleanup action, whichever is less stringent.

(c) A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provisions in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment.

(d) Nothing in this subsection constitutes a settlement or release of liability under the Model Toxics Control Act.

(13) **Institutional controls.** Institutional controls shall be required whenever any of the circumstances identified in WAC 173-340-440(4) are present at a site.

(14) **Burden of proof.** Any person responsible for undertaking a cleanup action under this chapter who proposes to:

(a) Use a reasonable maximum exposure scenario other than the default provided for each medium;

(b) Use assumptions other than the default values provided for in this chapter;

(c) Establish a cleanup level under Method C; or

(d) Use a conditional point of compliance, shall have the burden of demonstrating to the department that requirements in this chapter have been met to ensure protection of human health and the environment. The department shall only approve of such proposals when it determines that this burden of proof is met.

(15) **New scientific information.** The department shall consider new scientific information when establishing cleanup levels and remediation levels for individual sites. In making a determination on how to use this new information, the department shall, as appropriate, consult with the science advisory board, the department of health, and the United States Environmental Protection Agency. Any proposal to use new scientific information shall meet the quality of information requirements in subsection (16) of this section. To minimize delay in cleanups, any proposal to use new scientific information should be introduced as early in the cleanup process as possible. Proposals to use new scientific information may be considered up to the time of issuance of the final cleanup action plan governing the cleanup action for a site unless triggered as part of a periodic review under WAC 173-340-420 or through a reopener under RCW 70.105D.040 (4)(c).

(16) **Criteria for quality of information.**

(a) The intent of this subsection is to establish minimum criteria to be considered when evaluating information used by or submitted to the department proposing to modify the default methods or assumptions specified in this chapter or proposing methods or assumptions not specified in this chapter for calculating cleanup levels and remediation levels. This subsection does not establish a burden of proof or alter the burden of proof provided for elsewhere in this chapter.

(b) When deciding whether to approve or require modifications to the default methods or assumptions specified in this chapter for establishing cleanup levels and remediation levels or when deciding whether to approve or require alternative or additional methods or assumptions, the department shall consider information submitted by all interested persons and the quality of that information. When evaluating the quality of the information the department shall consider the following factors, as appropriate for the type of information submitted:

(i) Whether the information is based on a theory or technique that has widespread acceptance within the relevant scientific community;

(ii) Whether the information was derived using standard testing methods or other widely accepted scientific methods;

(iii) Whether a review of relevant available information, both in support of and not in support of the proposed modification, has been provided along with the rationale explaining the reasons for the proposed modification;

(iv) Whether the assumptions used in applying the information to the facility are valid and would ensure the proposed modification would err on behalf of protection of human health and the environment;

(v) Whether the information adequately addresses populations that are more highly exposed than the population as a whole and are reasonably likely to be present at the site; and

(vi) Whether adequate quality assurance and quality control procedures have been used, any significant anomalies are adequately explained, the limitations of the information are identified, and the known or potential rate of error is acceptable.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-702, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-702, filed 1/28/91, effective 2/28/91.]

WAC 173-340-703 Selection of indicator hazardous substances. (1) **Purpose.** When defining cleanup requirements at a site that is contaminated with a large number of hazardous substances, the department may eliminate from consideration those hazardous substances that contribute a small percentage of the overall threat to human health and the environment. The remaining hazardous substances shall serve as indicator hazardous substances for purposes of defining site cleanup requirements.

(2) **Approach.** If the department considers this approach appropriate for a particular site, the factors evaluated when eliminating individual hazardous substances from further consideration shall include:

(a) The toxicological characteristics of the hazardous substance that influence its ability to adversely affect human health or the environment relative to the concentration of the hazardous substance at the site, including consideration of essential nutrient requirements;

(b) The chemical and physical characteristics of the hazardous substance which govern its tendency to persist in the environment;

(c) The chemical and physical characteristics of the hazardous substance which govern its tendency to move into and through environmental media;

(d) The natural background concentrations of the hazardous substance;

(e) The thoroughness of testing for the hazardous substance at the site;

(f) The frequency that the hazardous substance has been detected at the site; and

(g) Degradation by-products of the hazardous substance.

(3) When the department determines that the use of indicator hazardous substances is appropriate for a particular site, it may also require biological testing to address potential toxic effects associated with hazardous substances eliminated from consideration under this subsection.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-703, filed 2/12/01, effective 8/15/01.]

WAC 173-340-704 Use of Method A. (1) **Applicability.** Method A may be used to establish cleanup levels at sites that have few hazardous substances and that meet one of the following criteria:

(a) Sites undergoing a routine cleanup action as defined in WAC 173-340-200; or

(b) Sites where numerical standards are available in this chapter or applicable state and federal laws for all indicator hazardous substances in the media for which the Method A cleanup level is being used.

(2) **Procedures.** Method A cleanup levels shall be established in accordance with the procedures in WAC 173-340-720 through 173-340-760. Method A cleanup levels shall be at least as stringent as all of the following:

(a) Concentrations of individual hazardous substances listed in Tables 720-1, 740-1, or 745-1 in this chapter;

(b) Concentrations of individual hazardous substances established under applicable state and federal laws;

(c) Concentrations that result in no significant adverse effects on the protection and propagation of terrestrial ecological receptors using the procedures specified in WAC 173-340-7490 through 173-340-7493, unless it is demonstrated under those sections that establishing a soil concentration is unnecessary; and

(d) For individual hazardous substances deemed indicator hazardous substances for the medium of concern under WAC 173-340-708(2) and not addressed under (a) and (b) of this subsection, concentrations that do not exceed natural background levels or the practical quantitation limit, whichever is higher, for the substance in question.

(3) **More stringent cleanup levels.** The department may establish Method A cleanup levels more stringent than those required by subsection (2) of this section, when based on a site-specific evaluation, the department determines that such levels are necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(4) **Remediation levels.** Under Method A, the Method B formulas may be modified for the purpose of using a human health risk assessment to evaluate the protectiveness of a remedy. WAC 173-340-708 (3) and (10) describe the adjustments that can be made to the Method B formulas. Also see WAC 173-340-355 and 173-340-357 for more detailed information on remediation levels and quantitative risk assessment.

(5) **Inconsistencies.** If there are any inconsistencies between this section and any specifically referenced sections, the referenced section shall govern.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-704, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-704, filed 1/28/91, effective 2/28/91.]

WAC 173-340-705 Use of Method B. (1) **Applicability.** Method B is applicable to all sites. It shall be used to develop cleanup levels unless one or more of the conditions for using Method A or Method C are demonstrated to exist and the person conducting the cleanup action elects to use that method.

(2) **Cleanup levels.** Method B consists of two approaches, standard and modified. Standard Method B uses default formulas, assumptions, and procedures to develop cleanup levels. Under modified Method B chemical-specific or site-specific information may be used to change certain assumptions to calculate different cleanup levels. When the term "Method B" is used in this chapter, it means both standard and modified Method B. Method B cleanup levels shall be established in accordance with the procedures in WAC 173-340-720 through 173-340-760. Method B cleanup levels shall be at least as stringent as all of the following:

(a) Concentrations of individual hazardous substances established under applicable state and federal laws;

(b) Concentrations that are estimated to result in no adverse effects on the protection and propagation of aquatic life, and no significant adverse effects on terrestrial ecological receptors using the procedures specified in WAC 173-340-7490 through 173-340-7494;

(c) For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which protect human health as determined by the following methods:

(i) Concentrations that are estimated to result in no acute or chronic toxic effects on human health as determined using a hazard quotient of one (1) and the procedures specified in WAC 173-340-720 through 173-340-760;

(ii) For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one million (1×10^{-6}) as determined using the procedures specified in WAC 173-340-720 through 173-340-760; and

(iii) Concentrations that eliminate or minimize the potential for food chain contamination as necessary to protect human health.

(3) **More stringent cleanup levels.** The department may establish Method B cleanup levels that are more stringent than those required by subsection (2) of this section, when based upon a site-specific evaluation, the department determines that such levels are necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(4) **Multiple hazardous substances or pathways.** Concentrations of individual hazardous substances established under subsections (2) and (3) of this section, including those based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(5) **Adjustments to cleanup levels based on applicable laws.** Where a cleanup level is based on an applicable state

or federal law, and the level of risk upon which the applicable state and federal law is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level must be adjusted downward so that the total excess cancer risk and hazard index at the site does not exceed the limits established in subsection (4) of this section.

(6) **Limitation on adjustments.** Cleanup levels determined using Method B, including cleanup levels adjusted under subsections (4) and (5) of this section, shall not be set at levels below the practical quantitation limit or natural background, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements on practical quantitation limits and natural background.

(7) **Remediation levels.** Method B formulas may be modified for the purpose of using a human health risk assessment to evaluate the protectiveness of a remedy. WAC 173-340-708 (3) and (10) describe the adjustments that can be made to the Method B formulas. Also see WAC 173-340-355 and 173-340-357 for more detailed information on remediation levels and quantitative risk assessment.

(8) **Inconsistencies.** If there are any inconsistencies between this section and any specifically referenced sections, the referenced section shall govern.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-705, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-705, filed 1/28/91, effective 2/28/91.]

WAC 173-340-706 Use of Method C. (1) **Applicability.** Method C cleanup levels represent concentrations that are protective of human health and the environment for specified site uses and conditions. A site (or portion of a site) that qualifies for a Method C cleanup level for one medium does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium. Method C cleanup levels may be used in the following situations:

(a) For surface water, ground water and air, Method C cleanup levels may be established where the person conducting the cleanup action can demonstrate that such levels comply with applicable state and federal laws, that all practicable methods of treatment are used, that institutional controls are implemented in accordance with WAC 173-340-440, and that one or more of the following conditions exist:

(i) Where Method A or B cleanup levels are below area background concentrations, Method C cleanup levels may be established at concentrations that are equal to area background concentrations, but in no case greater than concentrations specified in subsection (2) of this section;

(ii) Where attainment of Method A or B cleanup levels has the potential for creating a significantly greater overall threat to human health or the environment than attainment of Method C cleanup levels established under this chapter, Method C cleanup levels may be established at concentrations that minimize those overall threats, but in no case greater than concentrations specified in subsection (2) of this section. Factors that shall be considered in making this determination include:

(A) Results of a site-specific risk assessment;

(B) Duration of threats;

(C) Reversibility of threats;

(D) Magnitude of threats; and

(E) Nature of affected population.

(iii) Where Method A or B cleanup levels are below technically possible concentrations, Method C cleanup levels may be established at the technically possible concentrations, but in no case greater than levels specified in subsection (2) of this section.

(b) Method C soil cleanup levels may only be established where the person conducting the cleanup action can demonstrate that the area under consideration is an industrial property and meets the criteria for establishing industrial soil cleanup levels under WAC 173-340-745.

(c) Method C air cleanup levels may also be established for facilities qualifying as industrial property under WAC 173-340-745 and for utility vaults and manholes. (See WAC 173-340-750.)

(2) **Cleanup levels.** Method C consists of two approaches, standard and modified. Standard Method C uses default formulas, assumptions, and procedures to develop cleanup levels. Under modified Method C, chemical-specific or site-specific information may be used to change certain assumptions to calculate different cleanup levels. When the term "Method C" is used in this chapter, it means both standard and modified Method C. Method C cleanup levels shall be established in accordance with the procedures in WAC 173-340-720 through 173-340-760. Method C cleanup levels shall be at least as stringent as all of the following:

(a) Concentrations established under applicable state and federal laws;

(b) Concentrations that are estimated to result in no significant adverse effects on the protection and propagation of aquatic life, and no significant adverse effects on wildlife using the procedures specified in WAC 173-340-7490 through 173-340-7494;

(c) For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which are protective of human health as determined by the following methods:

(i) Concentrations that are estimated to result in no significant adverse acute or chronic toxic effects on human health as estimated using a hazard quotient of one (1) and the procedures defined in WAC 173-340-720 through 173-340-760;

(ii) For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand (1×10^{-5}) as determined using the procedures defined in WAC 173-340-720 through 173-340-760; and

(iii) Concentrations that eliminate or minimize the potential for food chain contamination as necessary to protect human health.

(3) **More stringent cleanup levels.** The department may establish Method C cleanup levels that are more stringent than those required by subsection (2) of this section when based upon a site-specific evaluation, the department determines that such levels are necessary to protect human health and the environment. Any imposition of more strin-

gent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(4) **Multiple hazardous substances or pathways.** Concentrations of individual hazardous substances established under subsections (2) and (3) of this section, including those based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(5) **Adjustments to cleanup levels based on applicable laws.** When a cleanup level is based on an applicable state or federal law and the level of risk upon which the applicable law is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level must be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(6) **Limitation on adjustments.** Cleanup levels determined using Method C, including cleanup levels adjusted under subsections (4) and (5) of this section, shall not be set at levels below the practical quantitation limit or natural background, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements on practical quantitation limits and natural background.

(7) **Remediation levels.** Method C formulas may be modified for the purpose of using a human health risk assessment to evaluate the protectiveness of a remedy. WAC 173-340-708 (3) and (10) describe the adjustments that can be made to the Method C formulas. Also see WAC 173-340-355 and 173-340-357 for more detailed information on remediation levels and quantitative risk assessment.

(8) **Inconsistencies.** If there are any inconsistencies between this subsection and any specifically referenced sections, the referenced section shall govern.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-706, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-706, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-706, filed 1/28/91, effective 2/28/91.]

WAC 173-340-707 Analytical considerations. (1) Analytical methods used to evaluate the effectiveness of a cleanup action shall comply with the requirements in WAC 173-340-830.

(2) The department recognizes that there may be situations where a hazardous substance is not detected or is detected at a concentration below the practical quantitation limit utilizing sampling and analytical procedures which comply with the requirements of WAC 173-340-830. If those situations arise and the practical quantitation limit is higher than the cleanup level for that substance, the cleanup level shall be considered to have been attained, subject to subsection (4) of this section, only when the more stringent of the following conditions are met:

(a) The practical quantitation limit is no greater than ten times the method detection limit; or

(b) The practical quantitation limit for the particular hazardous substance, medium, and analytical procedure is no greater than the practical quantitation limit established by the United States Environmental Protection Agency and used to establish requirements in 40 CFR 136, 40 CFR 141 through 143, or 40 CFR 260 through 270.

(3) In cases where a cleanup level required by this chapter is less than the practical quantitation limit using an approved analytical procedure, the department may also require one or more of the following:

(a) Use of surrogate measures of hazardous substance contamination;

(b) Use or development of specialized sample collection or analysis techniques to improve the method detection limit or practical quantitation limit for the hazardous substances at the site; or

(c) Monitoring to assure that the concentration of a hazardous substance does not exceed detectable levels.

(4) When the practical quantitation limit is above the cleanup level, the department shall consider the availability of improved analytical techniques when performing periodic reviews under WAC 173-340-420. Subsequent to those reviews, the department may require the use of improved analytical techniques with lower practical quantitation limits and other appropriate actions.

[Statutory Authority: Chapter 70.105D RCW. 91-04-019, § 173-340-707, filed 1/28/91, effective 2/28/91.]

WAC 173-340-708 Human health risk assessment procedures. (1) **Purpose.** This section defines the risk assessment framework that shall be used to establish cleanup levels, and remediation levels using a quantitative risk assessment, under this chapter. As used in this section, cleanup levels and remediation levels means the human health risk assessment component of these levels. This chapter defines certain default values and methods to be used in calculating cleanup levels and remediation levels. This section allows varying from these default values and methods under certain circumstances. When deciding whether to approve alternate values and methods the department shall ensure that the use of alternative values and methods will not significantly delay site cleanups.

(2) **Selection of indicator hazardous substances.**

When defining cleanup requirements at a site that is contaminated with a large number of hazardous substances, the department may eliminate from consideration those hazardous substances that contribute a small percentage of the overall threat to human health and the environment. The remaining hazardous substances shall serve as indicator hazardous substances for purposes of defining site cleanup requirements. See WAC 173-340-703 for additional information on establishing indicator hazardous substances.

(3) **Reasonable maximum exposure.**

(a) Cleanup levels and remediation levels shall be based on estimates of current and future resource uses and reasonable maximum exposures expected to occur under both cur-

rent and potential future site use conditions, as specified further in this chapter.

(b) The reasonable maximum exposure is defined as the highest exposure that is reasonably expected to occur at a site under current and potential future site use. WAC 173-340-720 through 173-340-760 define the reasonable maximum exposures for ground water, surface water, soil, and air. These reasonable maximum exposures will apply to most sites where individuals or groups of individuals are or could be exposed to hazardous substances. For example, the reasonable maximum exposure for most ground water is defined as exposure to hazardous substances in drinking water and other domestic uses.

(c) Persons performing cleanup actions under this chapter may use the evaluation criteria in WAC 173-340-720 through 173-340-760, where allowed in those sections, to demonstrate that the reasonable maximum exposure scenarios specified in those sections are not appropriate for cleanup levels for a particular site. For example, the criteria in WAC 173-340-720(2) could be used to demonstrate that the reasonable maximum exposure for ground water beneath a site does not need to be based on drinking water use. The use of an alternate exposure scenario shall be documented by the person performing the cleanup action. Documentation for the use of alternate exposure scenarios under this provision shall be based on the results of investigations performed in accordance with WAC 173-340-350.

(d) Persons performing cleanup actions under this chapter may also use alternate reasonable maximum exposure scenarios to help assess the protectiveness to human health of a cleanup action alternative that incorporates remediation levels and uses engineered controls and/or institutional controls to limit exposure to the contamination remaining on the site.

(i) An alternate reasonable maximum exposure scenario shall reflect the highest exposure that is reasonably expected to occur under current and potential future site conditions considering, among other appropriate factors, the potential for institutional controls to fail and the extent of the time period of failure under these scenarios and the land uses at the site.

(ii) Land uses other than residential and industrial, such as agricultural, recreational, and commercial, shall not be used as the basis for a reasonable maximum exposure scenario for the purpose of establishing a cleanup level. However, these land uses may be used as a basis for an alternate reasonable maximum exposure scenario for the purpose of assessing the protectiveness of a remedy. For example, if a cap (with appropriate institutional controls) is the proposed cleanup action at a commercial site, the reasonable maximum exposure scenario for assessing the protectiveness of the cap with regard to direct soil contact could be changed from a child living on the site to a construction or maintenance worker and child trespasser scenario.

(iii) The department expects that in evaluating the protectiveness of a remedy with regard to the soil direct contact pathway, many types of commercial sites may, where appropriate, qualify for alternative exposure scenarios under this provision since contaminated soil at these sites is typically characterized by a cover of buildings, pavement, and landscaped areas. Examples of these types of sites include:

(A) Commercial properties in a location removed from single family homes, duplexes or subdivided individual lots;

(B) Private and public recreational facilities where access to these facilities is physically controlled (e.g., a private golf course to which access is restricted by fencing);

(C) Urban residential sites (e.g., upper-story residential units over ground floor commercial businesses);

(D) Offices, restaurants, and other facilities primarily devoted to support administrative functions of a commercial/industrial nature (e.g., an employee credit union or cafeteria in a large office or industrial complex).

(e) A conceptual site model may be used to identify when individuals or groups of individuals may be exposed to hazardous substances through more than one exposure pathway. For example, a person may be exposed to hazardous substances from a site by drinking contaminated ground water, eating contaminated fish, and breathing contaminated air. At sites where the same individuals or groups of individuals are or could be consistently exposed through more than one pathway, the reasonable maximum exposure shall represent the total exposure through all of those pathways. At such sites, the cleanup levels and remediation levels derived for individual pathways under WAC 173-340-720 through 173-340-760 and WAC 173-340-350 through 173-340-390 shall be adjusted downward to take into account multiple exposure pathways.

(4) **Cleanup levels for individual hazardous substances.** Cleanup levels for individual hazardous substances will generally be based on a combination of requirements in applicable state and federal laws and risk assessment.

(5) **Multiple hazardous substances.**

(a) Cleanup levels for individual hazardous substances established under Methods B and C and remediation levels shall be adjusted downward to take into account exposure to multiple hazardous substances. This adjustment needs to be made only if, without this adjustment, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}).

(b) Adverse effects resulting from exposure to two or more hazardous substances with similar types of toxic response are assumed to be additive unless scientific evidence is available to demonstrate otherwise. Cancer risks resulting from exposure to two or more carcinogens are assumed to be additive unless scientific evidence is available to demonstrate otherwise.

(c) For noncarcinogens, for purposes of establishing cleanup levels under Methods B and C, and for remediation levels, the health threats resulting from exposure to two or more hazardous substances with similar types of toxic response may be apportioned between those hazardous substances in any combination as long as the hazard index does not exceed one (1).

(d) For carcinogens, for purposes of establishing cleanup levels under Methods B and C, and for remediation levels, the cancer risks resulting from exposure to multiple hazardous substances may be apportioned between hazardous substances in any combination as long as the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}).

(e) The department may require biological testing to assess the potential interactive effects associated with chemical mixtures.

(f) When making adjustments to cleanup levels and remediation levels for multiple hazardous substances, the concentration for individual hazardous substances shall not be adjusted downward to less than the practical quantitation limit or natural background.

(6) **Multiple pathways of exposure.**

(a) Estimated doses of individual hazardous substances resulting from more than one pathway of exposure are assumed to be additive unless scientific evidence is available to demonstrate otherwise.

(b) Cleanup levels and remediation levels based on one pathway of exposure shall be adjusted downward to take into account exposures from more than one exposure pathway. The number of exposure pathways considered at a given site shall be based on the reasonable maximum exposure scenario as defined in WAC 173-340-708(3). This adjustment needs to be made only if exposure through multiple pathways is likely to occur at a site and, without the adjustment, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}).

(c) For noncarcinogens, for purposes of establishing cleanup levels under Methods B and C, and remediation levels, the health threats associated with exposure via multiple pathways may be apportioned between exposure pathways in any combination as long as the hazard index does not exceed one (1).

(d) For carcinogens, for purposes of establishing cleanup levels under Methods B and C, and for remediation levels, the cancer risks associated with exposure via multiple pathways may be apportioned between exposure pathways in any combination as long as the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}).

(e) When making adjustments to cleanup levels and remediation levels for multiple pathways of exposure, the concentration for individual hazardous substances shall not be adjusted downward to less than the practical quantitation limit or natural background.

(7) **Reference doses.**

(a) The chronic reference dose/reference concentration and the developmental reference dose/reference concentration shall be used to establish cleanup levels and remediation levels under this chapter. Cleanup levels and remediation levels shall be established using the value which results in the most protective concentration.

(b) Inhalation reference doses/reference concentrations shall be used in WAC 173-340-750. Where the inhalation reference dose/reference concentration is reported as a concentration in air, that value shall be converted to a corresponding inhaled intake (mg/kg-day) using a human body weight of 70 kg and an inhalation rate of 20 m^3/day, and take into account, where available, the respiratory deposition and absorption characteristics of the gases and inhaled particles.

(c) A subchronic reference dose/reference concentration may be used to evaluate potential noncarcinogenic effects resulting from exposure to hazardous substances over short periods of time. This value may be used in place of the chronic reference dose/reference concentration where it can be demonstrated that a particular hazardous substance will degrade to negligible concentrations during the exposure period.

(d) For purposes of establishing cleanup levels and remediation levels for hazardous substances under this chapter, a reference dose/reference concentration established by the United States Environmental Protection Agency and available through the "integrated risk information system" (IRIS) data base shall be used. If a reference dose/reference concentration is not available through the IRIS data base, a reference dose/reference concentration from the U.S. EPA Health Effects Assessment Summary Table ("HEAST") data base or, if more appropriate, the National Center for Environmental Assessment ("NCEA") shall be used.

(e) If a reference dose/reference concentration is available through IRIS, HEAST, or the NCEA, it shall be used unless the department determines that there is clear and convincing scientific data which demonstrates that the use of this value is inappropriate.

(f) If a reference dose/reference concentration for a hazardous substance including petroleum fractions and petroleum constituents is not available through IRIS, HEAST or the NCEA or is demonstrated to be inappropriate under (e) of this subsection and the department determines that development of a reference dose/reference concentration is necessary for the hazardous substance at the site, then a reference dose/reference concentration shall be established on a case-by-case basis. When establishing a reference dose on a case-by-case basis, the methods described in "Reference Dose (RfD): Description and Use in Health Risk Assessment: Background Document 1A", USEPA, March 15, 1993, shall be used.

(g) In estimating a reference dose/reference concentration for a hazardous substance under (e) or (f) of this subsection, the department shall, as appropriate, consult with the science advisory board, the department of health, and the United States Environmental Protection Agency and may, as appropriate, consult with other qualified persons. Scientific data supporting such a change shall be subject to the requirements under WAC 173-340-702 (14), (15) and (16). Once the department has established a reference dose/reference concentration for a hazardous substance under this provision, the department is not required to consult again for the same hazardous substance.

(h) Where a reference dose/reference concentration other than those established under (d) or (g) of this subsection is used to establish a cleanup level or remediation level at individual sites, the department shall summarize the scientific rationale for the use of those values in the cleanup action plan. The department shall provide the opportunity for public review and comment on this value in accordance with the requirements of WAC 173-340-380 and 173-340-600.

(8) **Carcinogenic potency factor.**

(a) For purposes of establishing cleanup levels and remediation levels for hazardous substances under this chapter, a carcinogenic potency factor established by the United States Environmental Protection Agency and available through the IRIS data base shall be used. If a carcinogenic potency factor is not available from the IRIS data base, a carcinogenic

potency factor from HEAST or, if more appropriate, from the NCEA shall be used.

(b) If a carcinogenic potency factor is available from the IRIS, HEAST or the NCEA, it shall be used unless the department determines that there is clear and convincing scientific data which demonstrates that the use of this value is inappropriate.

(c) If a carcinogenic potency factor is not available through IRIS, HEAST or the NCEA or is demonstrated to be inappropriate under (b) of this subsection and the department determines that development of a cancer potency factor is necessary for the hazardous substance at the site, then one of the following methods shall be used to establish a carcinogenic potency factor:

(i) The carcinogenic potency factor may be derived from appropriate human epidemiology data on a case-by-case basis; or

(ii) The carcinogenic potency factor may be derived from animal bioassay data using the following procedures:

(A) All carcinogenicity bioassays shall be reviewed and data of appropriate quality shall be used for establishing the carcinogenic potency factor.

(B) The linearized multistage extrapolation model shall be used to estimate the slope of the dose-response curve unless the department determines that there is clear and convincing scientific data which demonstrates that the use of an alternate extrapolation model is more appropriate;

(C) All doses shall be adjusted to give an average daily dose over the study duration; and

(D) An interspecies scaling factor shall be used to take into account differences between animals and humans. For oral carcinogenic toxicity values this scaling factor shall be based on the assumption that milligrams per surface area is an equivalent dose between species unless the department determines there is clear and convincing scientific data which demonstrates that an alternate procedure is more appropriate. The slope of the dose response curve for the test species shall be multiplied by this scaling factor in order to obtain the carcinogenic potency factor, except where such scaling factors are incorporated into the extrapolation model under (B) of this subsection. The procedure to derive a human equivalent concentration of inhaled particles and gases shall take into account, where available, the respiratory deposition and absorption characteristics of the gases and inhaled particles. Where adequate pharmacokinetic and metabolism studies are available, data from these studies may be used to adjust the interspecies scaling factor.

(d) When assessing the potential carcinogenic risk of mixtures of chlorinated dibenzo-p-dioxins (CDD) and chlorinated dibenzofurans (CDF) either of the following methods shall be used unless the department determines that there is clear and convincing scientific data which demonstrates that the use of these methods is inappropriate:

(i) The entire mixture is assumed to be as toxic as 2, 3, 7, 8 CDD or 2, 3, 7, 8 CDF, as applicable; or

(ii) The toxicity equivalency factors and methodology described in: EPA. 1989. "*Interim procedures for estimating risks associated with exposure to mixtures of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs) and 1989 update,*" USEPA, Risk Assessment Forum, Washington, D.C., publication number EPA/625/3-89/016.

(e) When assessing the potential carcinogenic risk of mixtures of polycyclic aromatic hydrocarbons, either of the following methods shall be used unless the department determines that there is clear and convincing scientific data which demonstrates that the use of these methods is inappropriate:

(i) The entire mixture is assumed to be as toxic as benzo(a)pyrene; or

(ii) The toxicity equivalency factors and methodology described in "*CalEPA. 1994. Benzo(a)pyrene as a toxic air contaminant. Part B: Health Assessment.*" Published by the Office of Environmental Health Hazard Assessment, California Environmental Protection Agency, Berkeley, CA. When using this methodology, at a minimum, the following compounds shall be analyzed for and included in the calculations: Benzo[a]pyrene, Benz[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Indeno[1,2,3cd]pyrene. The department may require additional compounds from the CalEPA list to be included in the methodology should site testing data or information from other comparable sites or waste types indicate the additional compounds are potentially present at the site. *NOTE: Many of the polycyclic aromatic hydrocarbons on the CalEPA list are found primarily in air emissions from combustion sources and may not be present in the soil or water at contaminated sites. Users should consult with the department for information on the need to test for these additional compounds.*

(f) In estimating a carcinogenic potency factor for a hazardous substance under (c) of this subsection, the department shall, as appropriate, consult with the science advisory board, the department of health, and the United States Environmental Protection Agency and may, as appropriate, consult with other qualified persons. Scientific data supporting such a change shall be subject to the requirements under WAC 173-340-702 (14), (15) and (16). Once the department has established a carcinogenic potency factor for a hazardous substance under this provision, the department is not required to consult again for the same hazardous substance.

(g) Where a carcinogenic potency factor other than that established under (a), (d) and (e) of this subsection is used to establish cleanup levels or remediation levels at individual sites, the department shall summarize the scientific rationale for the use of that value in the cleanup action plan. The department shall provide the opportunity for public review and comment on this value in accordance with the requirements of WAC 173-340-380 and 173-340-600.

(9) **Bioconcentration factors.**

(a) For purposes of establishing cleanup levels and remediation levels for a hazardous substance under WAC 173-340-730, a bioconcentration factor established by the United States Environmental Protection Agency and used to establish the ambient water quality criterion for that substance under section 304 of the Clean Water Act shall be used. These values shall be used unless the department determines that there is adequate scientific data which demonstrates that the use of an alternate value is more appropriate. If the department determines that a bioconcentration factor is

appropriate for a specific hazardous substance and no such factor has been established by USEPA, then other appropriate EPA documents, literature sources or empirical information may be used to determine a bioconcentration factor.

(b) When using a bioconcentration factor other than that used to establish the ambient water quality criterion, the department shall, as appropriate, consult with the science advisory board, the department of health, and the United States Environmental Protection Agency. Scientific data supporting such a value shall be subject to the requirements under WAC 173-340-702 (14), (15) and (16). Once the department has established a bioconcentration factor for a hazardous substance under this provision, the department is not required to consult again for the same hazardous substance.

(c) Where a bioconcentration factor other than that established under (a) of this subsection is used to establish cleanup levels or remediation levels at individual sites, the department shall summarize the scientific rationale for the use of that factor in the draft cleanup action plan. The department shall provide the opportunity for public review and comment on the value in accordance with the requirements of WAC 173-340-380 and 173-340-600.

(10) **Exposure parameters.**

(a) As a matter of policy, the department has defined in WAC 173-340-720 through 173-340-760 the default values for exposure parameters to be used when establishing cleanup levels and remediation levels under this chapter. Except as provided for in (b) and (c) of this subsection and in WAC 173-340-720 through 173-340-760, these default values shall not be changed for individual hazardous substances or sites.

(b) Exposure parameters that are primarily a function of the exposed population characteristics (such as body weight and lifetime) and those that are primarily a function of human behavior that cannot be controlled through an engineered or institutional control (such as: Fish consumption rate; soil ingestion rate; drinking water ingestion rate; and breathing rate) are not expected to vary on a site-by-site basis. The default values for these exposure parameters shall not be changed when calculating cleanup levels except when necessary to establish a more stringent cleanup level to protect human health. For remediation levels the default values for these exposure parameters may only be changed when an alternate reasonable maximum exposure scenario is used, as provided for in WAC 173-340-708 (3)(d), that reflects a different exposed population such as using an adult instead of a child exposure scenario. Other exposure parameters may be changed only as follows:

(i) For calculation of cleanup levels, the types of exposure parameters that may be changed are those that are:

(A) Primarily a function of reliably measurable characteristics of the hazardous substance, soil, hydrologic or hydrogeologic conditions at the site; and

(B) Not dependent on the success of engineered controls or institutional controls for controlling exposure of persons to the hazardous substances at the site.

The default values for these exposure parameters may be changed where there is adequate scientific data to demonstrate that use of an alternative or additional value would be more appropriate for the conditions present at the site. Examples of exposure parameters for which the default values may be changed under this provision are as follows: Contaminant leaching and transport variables (such as the soil organic carbon content, aquifer permeability and soil sorption coefficient); inhalation correction factor; fish bioconcentration factor; soil gastrointestinal absorption fraction; and inhalation absorption percentage.

(ii) For calculation of remediation levels, in addition to the exposure parameters that may be changed under (b)(i) of this subsection, the types of exposure parameters that may be changed from the default values are those where a demonstration can be made that the proposed cleanup action uses engineered controls and/or institutional controls that can be successfully relied on, for the reasonably foreseeable future, to control contaminant mobility and/or exposure to the contamination remaining on the site. In general, exposure parameters that may be changed under this provision are those that define the exposure frequency, exposure duration and exposure time. The default values for these exposure parameters may be changed where there is adequate scientific data to demonstrate that use of an alternative or additional value would be more appropriate for the conditions present at the site. Examples of exposure parameters for which the default value may be changed under this provision are as follows: Infiltration rate; frequency of soil contact; duration of soil exposure; duration of drinking water exposure; duration of air exposure; drinking water fraction; and fish diet fraction.

(c) When the modifications provided for in (b) of this subsection result in significantly higher values for cleanup levels or remediation levels than would be calculated using the default values for exposure parameters, the risk from other potentially relevant pathways of exposure shall be addressed under the procedures provided for in WAC 173-340-720 through 173-340-760. For exposure pathways and parameters for which default values are not specified in this chapter, the framework provided for by this subsection, along with the quality of information requirements in WAC 173-340-702, shall be used to establish appropriate or additional assumptions for these parameters and pathways.

(d) Where the department approves the use of exposure parameters other than those established under WAC 173-340-720 through 173-340-760 to establish cleanup levels or remediation levels at individual sites, the department shall summarize the scientific rationale for the use of those parameters in the cleanup action plan. The department shall provide the opportunity for public review and comment on those values in accordance with the requirements of WAC 173-340-380 and 173-340-600. Scientific data supporting such a change shall be subject to the requirements under WAC 173-340-702 (14), (15) and (16).

(11) **Probabilistic risk assessment.** Probabilistic risk assessment methods may be used under this chapter only on an informational basis for evaluating alternative remedies. Such methods shall not be used to replace cleanup standards and remediation levels derived using deterministic methods under this chapter until the department has adopted rules describing adequate technical protocols and policies for the use of probabilistic risk assessment under this chapter.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-708, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-708, filed 1/28/91, effective 2/28/91.]

WAC 173-340-709 Methods for defining background concentrations. (1) **Purpose.** Sampling of hazardous substances in background areas may be conducted to distinguish site-related concentration from nonsite related concentrations of hazardous substances or to support the development of a Method C cleanup level under the provisions of WAC 173-340-706. For purposes of this chapter, two types of background may be determined, natural background and area background concentrations, as defined in WAC 173-340-200.

(2) **Background concentrations.** For purposes of defining background concentrations, samples shall be collected from areas that have the same basic characteristics as the medium of concern at the site, have not been influenced by releases from the site and, in the case of natural background concentrations, have not been influenced by releases from other localized human activities.

(3) **Statistical analysis.**

(a) The statistical methods used to evaluate data sets shall be appropriate for the distribution of each hazardous substance. More than one statistical method may be required at a site.

(b) Background sampling data shall be assumed to be lognormally distributed unless it can be demonstrated that another distribution is more appropriate.

(c) For lognormally distributed data sets, background shall be defined as the true upper 90th percentile or four times the true 50th percentile, whichever is lower.

(d) For normally distributed data sets, background shall be defined as the true upper 80th percentile or four times the true 50th percentile, whichever is lower.

(e) Other statistical methods may be used if approved by the department.

(4) **Sample size.** When determining natural background concentrations for soil, a sample size of ten or more background soil samples shall be required. When determining area background concentrations for soil, a sample size of twenty or more soil samples shall be required. The number of samples for other media shall be sufficient to provide a representative measure of background concentrations and shall be determined on a case-by-case basis.

(5) **Procedures.** For the purposes of estimating background concentrations, the following procedures shall be used for measurements below the practical quantitation limit:

(a) Measurements below the method detection limit shall be assigned a value equal to one-half of the method detection limit.

(b) Measurements above the method detection limit, but below the practical quantitation limit shall be assigned a value equal to the method detection limit.

(c) The department may approve the use of alternate statistical procedures for handling data below the method detection limit or practical quantitation limit.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-709, filed 2/12/01, effective 8/15/01.]

WAC 173-340-710 Applicable local, state and federal laws. (1) **Applicable state and federal laws.**

All cleanup actions conducted under this chapter shall comply with applicable state and federal laws. For purposes of this chapter, the term "applicable state and federal laws" shall include legally applicable requirements and those requirements that the department determines, based on consideration of the criteria in subsection (4) of this section, are relevant and appropriate requirements.

(2) **Department determination.** The person conducting a cleanup action shall identify all applicable state and federal laws. The department shall make the final interpretation on whether these requirements have been correctly identified and are legally applicable or relevant and appropriate.

(3) **Legally applicable requirements.** Legally applicable requirements include those cleanup standards, standards of control, and other environmental protection requirements, criteria, or limitations adopted under state or federal law that specifically address a hazardous substance, cleanup action, location or other circumstances at the site.

(4) **Relevant and appropriate requirements.** Relevant and appropriate requirements include those cleanup standards, standards of control, and other environmental requirements, criteria, or limitations established under state or federal law that, while not legally applicable to the hazardous substance, cleanup action, location, or other circumstance at a site, address problems or situations sufficiently similar to those encountered at the site that their use is well suited to the particular site. WAC 173-340-710 through 173-340-760 identifies several requirements the department shall consider relevant and appropriate for establishing cleanup standards. For other regulatory requirements, the following criteria shall be evaluated, where pertinent, to determine whether such requirements are relevant and appropriate for a particular hazardous substance, remedial action, or site:

(a) Whether the purpose for which the statute or regulations under which the requirement was created is similar to the purpose of the cleanup action;

(b) Whether the media regulated or affected by the requirement is similar to the media contaminated or affected at the site;

(c) Whether the hazardous substance regulated by the requirement is similar to the hazardous substance found at the site;

(d) Whether the entities or interests affected or protected by the requirement are similar to the entities or interests affected by the site;

(e) Whether the actions or activities regulated by the requirement are similar to the cleanup action contemplated at the site;

(f) Whether any variance, waiver, or exemption to the requirements are available for the circumstances of the site;

(g) Whether the type of place regulated is similar to the site;

(h) Whether the type and size of structure or site regulated is similar to the type and size of structure or site affected by the release or contemplated by the cleanup action; and

(i) Whether any consideration of use or potential use of affected resources in the requirement is similar to the use or

potential use of the resources affected by the site or contemplated cleanup action.

(5) **Variances.** For purposes of this chapter, a regulatory variance or waiver provision included in an applicable state and federal law shall be considered potentially applicable to interim actions and cleanup actions and the department may determine that a particular regulatory variance or waiver is appropriate if the substantive conditions for such a regulatory variance or waiver are met. In all such cases, interim actions and cleanup actions shall be protective of human health and the environment.

(6) **New requirements.** The department shall consider new applicable state and federal laws as part of the periodic review under WAC 173-340-420. Cleanup actions shall be evaluated in light of these new requirements to determine whether the cleanup action is still protective of human health and the environment.

(7) **Selection of cleanup actions.** To demonstrate compliance with WAC 173-340-350 through 173-340-390, cleanup actions shall comply with all applicable state and federal laws in addition to the other requirements of this chapter. The following, which is not a complete list, are selected applications of specific applicable state and federal laws to cleanup actions.

(a) **Water discharge requirements.** Hazardous substances that are directly or indirectly released or proposed to be released to waters of the state shall be provided with all known, available and reasonable methods of treatment consistent with the requirements of chapters 90.48 and 90.54 RCW and the regulations that implement those statutes.

(b) **Air emission requirements.** Best available control technologies consistent with the requirements of chapter 70.94 RCW and the regulations that implement this statute shall be applied to releases of hazardous substances to the air resulting from cleanup actions at a site.

(c) **Solid waste landfill closure requirements.** For solid waste landfills, the solid waste closure requirements in chapter 173-304 WAC shall be minimum requirements for cleanup actions conducted under this chapter. In addition, when the department determines that the closure requirements in chapters 173-351 or 173-303 WAC are legally applicable or relevant and appropriate requirements, the more stringent closure requirements under those laws shall also apply to cleanup actions conducted under this chapter.

(d) **Sediment management requirements.** Sediment cleanup actions conducted under this chapter shall comply with the sediment cleanup standards in chapter 173-204 WAC. In addition, a remedial investigation/feasibility study conducted under WAC 173-340-350 shall also comply with the cleanup study plan requirements under chapter 173-204 WAC. The process for selecting sediment cleanup actions under this chapter shall comply with the requirements in WAC 173-340-350 through 173-340-390.

(8) **Interim actions.** Interim actions conducted under this chapter shall comply with legally applicable requirements. The department may also determine, based on the criteria in subsection (3) of this section, that other requirements, criteria, or limitations are relevant and appropriate for interim actions.

(9) **Permits and exemptions.**

(a) Independent remedial actions must obtain permits required by other federal, state and local laws.

(b) Under RCW 70.105D.090, remedial actions conducted under a consent decree, order, or agreed order, and the department when it conducts a remedial action are exempt from the procedural requirements of certain laws. This exemption shall not apply if the department determines that the exemption would result in loss of approval from a federal agency necessary for the state to administer any federal law. This exemption applies to the following laws:

(i) Chapter 70.94 RCW;

(ii) Chapter 70.95 RCW;

(iii) Chapter 70.105 RCW;

(iv) Chapter 75.20 RCW;

(v) Chapter 90.48 RCW;

(vi) Chapter 90.58 RCW; and

(vii) Any laws requiring or authorizing local government permits or approvals for the remedial action.

(c) Remedial actions exempt from procedural requirements under (a) and (b) of this subsection still must comply with the substantive requirements of these laws.

(d) The department shall ensure compliance with substantive requirements and provide an opportunity for comment by the public and by the state agencies and local governments that would otherwise implement these laws as follows:

(i) Before proposing any substantive requirements, the department or potentially liable persons, if directed to do so by the department, shall consult with the state agencies and local governments to identify potential permits and to obtain written documentation from the consulted agencies regarding the substantive requirements for permits exempted under RCW 70.105D.090.

(ii) The permit exemptions and the substantive requirements, to the extent they are known, shall be identified by the department in the order, decree, or if the cleanup is being conducted by the department, in the work plan prepared by the department.

(iii) A public notice of the order, decree or work plan shall be issued in accordance with WAC 173-340-600. The notice shall specifically identify the permits exempted under RCW 70.105D.090 and seek comment on the substantive requirements proposed to be applied to the remedial action. This notice shall be mailed to the state agencies and local governments that would otherwise implement these permits. This notice shall also be mailed to the same individuals that the state agencies and local government have identified that would normally be mailed notice to if a permit was being issued.

(iv) Substantive requirements, to the extent known and identified by the state agencies and local governments before issuing the order, decree or work plan and those identified by the state agencies and local government during the public comment period shall be incorporated into the order, decree or work plan if approved by the department.

(e) It shall be the continuing obligation of persons conducting remedial actions to determine whether additional permits or approvals or substantive requirements are required. In the event that either the person conducting the remedial

action or the department becomes aware of additional permits or approvals or substantive requirements that apply to the remedial action, they shall promptly notify the other party of this knowledge. The department, or the potentially liable person at the department's request, shall consult with the state or local agency on these additional requirements. The department shall make the final determination on the application of any additional substantive requirements at the site.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-710, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-710, filed 1/28/91, effective 2/28/91.]

WAC 173-340-720 Ground water cleanup standards.

(1) **General considerations.**

(a) Ground water cleanup levels shall be based on estimates of the highest beneficial use and the reasonable maximum exposure expected to occur under both current and potential future site use conditions. The department has determined that at most sites use of ground water as a source of drinking water is the beneficial use requiring the highest quality of ground water and that exposure to hazardous substances through ingestion of drinking water and other domestic uses represents the reasonable maximum exposure. Unless a site qualifies under subsection (2) of this section for a different ground water beneficial use, ground water cleanup levels shall be established using this presumed exposure scenario and be established in accordance with subsection (3), (4) or (5) of this section. If the site qualifies for a different ground water beneficial use, ground water cleanup levels shall be established under subsection (6) of this section.

(b) In the event of a release of a hazardous substance at a site, a cleanup action complying with this chapter shall be conducted to address all areas where the concentration of the hazardous substance in ground water exceeds cleanup levels.

(c) Ground water cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of surface water, sediments, soil, or air cleanup standards established under this chapter or other applicable state and federal laws. A site that qualifies for a Method C ground water cleanup level under this section does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(d) The department may require more stringent cleanup levels than specified in this section where necessary to protect other beneficial uses or otherwise protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708. The following are examples of situations that may require more stringent cleanup levels:

(i) Concentrations that are necessary to protect sensitive subgroups;

(ii) Concentrations that eliminate or minimize the potential for food chain contamination;

(iii) Concentrations that eliminate or minimize the potential for damage to soils or biota in the soils which could impair the use of the soil for agricultural or silvicultural purposes;

(iv) Concentrations that eliminate or minimize the potential for the accumulation of vapors in buildings or other structures to concentrations which pose a threat to human health or the environment; and

(v) Concentrations that protect nearby surface waters.

(2) **Potable ground water defined.** Ground water shall be classified as potable to protect drinking water beneficial uses unless the following can be demonstrated:

(a) The ground water does not serve as a current source of drinking water;

(b) The ground water is not a potential future source of drinking water for any of the following reasons:

(i) The ground water is present in insufficient quantity to yield greater than 0.5 gallon per minute on a sustainable basis to a well constructed in compliance with chapter 173-160 WAC and in accordance with normal domestic water well construction practices for the area in which the site is located;

(ii) The ground water contains natural background concentrations of organic or inorganic constituents that make use of the water as a drinking water source not practicable. Ground water containing total dissolved solids at concentrations greater than 10,000 mg/l shall normally be considered to have fulfilled this requirement; *(NOTE: The total dissolved solids concentration provided here is an example. There may be other situations where high natural background levels also meet this requirement.)* or

(iii) The ground water is situated at a great depth or location that makes recovery of water for drinking water purposes technically impossible; and

(c) The department determines it is unlikely that hazardous substances will be transported from the contaminated ground water to ground water that is a current or potential future source of drinking water, as defined in (a) and (b) of this subsection, at concentrations which exceed ground water quality criteria published in chapter 173-200 WAC.

In making a determination under this provision, the department shall consider site-specific factors including:

(i) The extent of affected ground water;

(ii) The distance to existing water supply wells;

(iii) The likelihood of interconnection between the contaminated ground water and ground water that is a current or potential future source of drinking water due to well construction practices in the area of the state where the site is located;

(iv) The physical and chemical characteristics of the hazardous substance;

(v) The hydrogeologic characteristics of the site;

(vi) The presence of discontinuities in the affected geologic stratum; and

(vii) The degree of confidence in any predictive modeling performed.

(d) Even if ground water is classified as a potential future source of drinking water under (b) of this subsection, the department recognizes that there may be sites where there is an extremely low probability that the ground water will be used for that purpose because of the site's proximity to surface water that is not suitable as a domestic water supply. An example of this situation would be shallow ground waters in close proximity to marine waters such as on Harbor Island in Seattle. At such sites, the department may allow ground water to be classified as nonpotable for the purposes of this section if each of the following conditions can be demon-

strated. These determinations must be for reasons other than that the ground water or surface water has been contaminated by a release of a hazardous substance at the site.

(i) The conditions specified in (a) and (c) of this subsection are met;

(ii) There are known or projected points of entry of the ground water into the surface water;

(iii) The surface water is not classified as a suitable domestic water supply source under chapter 173-201A WAC; and

(iv) The ground water is sufficiently hydraulically connected to the surface water that the ground water is not practicable to use as a drinking water source.

(3) **Method A cleanup levels for potable ground water.**

(a) **Applicability.** Method A ground water cleanup levels may only be used at sites qualifying under WAC 173-340-704(1).

(b) **General requirements.** Method A cleanup levels shall be at least as stringent as all of the following:

(i) Concentrations listed in Table 720-1 and compliance with the corresponding footnotes;

(ii) Concentrations established under applicable state and federal laws, including the following requirements:

(A) Maximum contaminant levels established under the Safe Drinking Water Act and published in 40 C.F.R. 141;

(B) Maximum contaminant level goals for noncarcinogens established under the Safe Drinking Water Act and published in 40 C.F.R. 141;

(C) Maximum contaminant levels established by the state board of health and published in chapter 246-290 WAC.

(iii) For hazardous substances deemed indicator hazardous substances for ground water under WAC 173-340-708(2) and for which there is no value in Table 720-1 or applicable state and federal laws, concentrations that do not exceed natural background or the practical quantitation limit, subject to the limitations in this chapter.

(iv) **Protection of surface water beneficial uses.** Concentrations established in accordance with the methods specified in WAC 173-340-730 for protecting surface water beneficial uses, unless it can be demonstrated that the hazardous substances are not likely to reach surface water. This demonstration must be based on factors other than implementation of a cleanup action at the site.

(4) **Method B cleanup levels for potable ground water.**

(a) **Applicability.** Method B potable ground water cleanup levels consist of standard and modified cleanup levels determined using the procedures in this subsection. Either standard or modified Method B ground water cleanup levels based on drinking water beneficial uses may be used at any site.

(b) **Standard Method B potable ground water cleanup levels.** Where the ground water cleanup level is based on a drinking water beneficial use, standard Method B cleanup levels shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws, including the requirements in subsection (3)(b)(ii) of this section;

(ii) **Protection of surface water beneficial uses.** Concentrations established in accordance with the methods specified in WAC 173-340-730 for protecting surface water beneficial uses, unless it can be demonstrated that the hazardous substances are not likely to reach surface water. This demonstration must be based on factors other than implementation of a cleanup action at the site.

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which protect human health as determined by the following methods:

(A) **Noncarcinogens.** Concentrations that are estimated to result in no acute or chronic toxic effects on human health as determined using Equation 720-1.

[Equation 720-1]

$$\text{Ground water cleanup level (ug/l)} = \frac{\text{RfD x ABW x UCF x HQ x AT}}{\text{DWIR x INH x DWF x ED}}$$

Where:

RfD =	Reference dose as specified in WAC 173-340-708(7) (mg/kg-day)
ABW =	Average body weight during the exposure duration (16 kg)
UCF =	Unit conversion factor (1,000 ug/mg)
HQ =	Hazard quotient (1) (unitless)
AT =	Averaging time (6 years)
DWIR =	Drinking water ingestion rate (1.0 liter/day)
INH =	Inhalation correction factor (use value of 2 for volatile organic compounds and 1 for all other substances [unitless])
DWF =	Drinking water fraction (1.0) (unitless)
ED =	Exposure duration (1.0) (6 years)

(B) **Carcinogens.** For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one million (1×10^{-6}) as determined using Equation 720-2.

[Equation 720-2]

$$\text{Ground water cleanup level (ug/l)} = \frac{\text{RISK x ABW x AT x UCF}}{\text{CPF x DWIR x ED x INH x DWF}}$$

Where:

RISK =	Acceptable cancer risk level (1 in 1,000,000) (unitless)
ABW =	Average body weight during the exposure duration (70 kg)
AT =	Averaging time (75 years)
UCF =	Unit conversion factor (1,000 ug/mg)
CPF =	Carcinogenic potency factor as specified in WAC 173-340-708(8) (kg-day/mg)
DWIR =	Drinking water ingestion rate (2.0 liters/day)
ED =	Exposure duration (30 years)
INH =	Inhalation correction factor (use value of 2 for volatile organic compounds and 1 for all other substances [unitless])
DWF =	Drinking water fraction (1.0) (unitless)

(C) **Petroleum mixtures.** For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated taking into account the additive effects of the petroleum fractions and volatile organic compounds present in the petroleum mixture. Equation 720-3 shall be used for this calculation. Cleanup levels for other noncarcinogens and known or suspected carcinogens within

the petroleum mixture shall be calculated using Equations 720-1 and 720-2. See Table 830-1 for the analyses required for various petroleum products to use this method. A total petroleum hydrocarbon cleanup level for petroleum mixtures derived using Equation 720-3 shall be adjusted when necessary so that biological degradation of the petroleum does not result in exceedances of the maximum contaminant levels in chapter 246-290 WAC or natural background, whichever is higher.

[Equation 720-3]

$$C_w = \frac{HI \times AT}{\left[\frac{DWIR \times DWF \times ED}{ABW \times UCF}\right] \times \sum_{i=1}^{n} \frac{F(i) \times INH(i)}{RfD(i)}}$$

AT and ED added to above equation

Where:

C_w = TPH ground water cleanup level (ug/l)
HI = Hazard index (1) (unitless)
AT = Averaging time (6 years)
DWIR = Drinking water intake rate (1.0 liter/day)
DWF = Drinking water fraction (1.0) (unitless)
ED = Exposure duration (6 years)
ABW = Average body weight during the exposure duration (16 kg)
UCF = Unit conversion factor (1,000 ug/mg)
$F_{(i)}$ = Fraction by weight of petroleum component (i). (Unitless) (Use site-specific ground water composition data, provided the data is representative of present and future conditions at the site, or use the ground water composition predicted under WAC 173-340-747
$INH_{(i)}$ = Inhalation correction fraction for petroleum component (i) (use value of 2 for volatile organic compounds and 1 for all other components [unitless])
$RfD_{(i)}$ = Reference dose of petroleum component (i) as specified in WAC 173-340-708(7) (mg/kg-day)
n = The number of petroleum components (petroleum fractions plus volatile organic compounds with an RfD) present in the petroleum mixture. (See Table 830-1.)

(c) **Modified Method B potable ground water cleanup levels.** Modified Method B ground water cleanup levels for drinking water beneficial uses are standard Method B ground water cleanup levels modified with chemical-specific or site-specific data. When making these adjustments, the resultant cleanup levels shall meet applicable state and federal laws and health risk levels for standard Method B ground water cleanup levels. Changes to exposure assumptions must comply with WAC 173-340-708(10). The following adjustments may be made to the default assumptions in the standard Method B equations to derive modified Method B ground water cleanup levels for drinking water beneficial uses:

(i) The inhalation correction factor is an adjustment factor that takes into account exposure to hazardous substances that are volatilized and inhaled during showering and other domestic activities. When available, hazardous substance-specific information may be used to estimate this factor;

(ii) Where separate toxicity factors (reference doses and carcinogenic potency factors) are available for inhalation and oral exposures, the health hazards associated with the inhalation of hazardous substances in ground water during showering and other domestic activities may be evaluated separately from the health hazards associated with ingestion of drinking water. In these cases, the ground water cleanup level based on ingestion of drinking water shall be modified to take into account multiple exposure pathways in accordance with WAC 173-340-708(6);

(iii) The toxicity equivalency factor procedures described in WAC 173-340-708(8) may be used for assessing the potential carcinogenic risk of mixtures of chlorinated dibenzo-p-dioxins, chlorinated dibenzofurans and polycyclic aromatic hydrocarbons;

(iv) Adjustments to the reference dose and cancer potency factor may be made if the requirements in WAC 173-340-708 (7) and (8) are met; and

(v) Modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16).

(d) **Using modified Method B to evaluate ground water remediation levels.** In addition to the adjustments allowed under (c) of this subsection, other adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(5) **Method C cleanup levels for potable ground water.**

(a) **Applicability.** Method C potable ground water cleanup levels consist of standard and modified cleanup levels as described in this subsection.

The department may approve of both standard and modified Method C ground water cleanup levels based on drinking water beneficial uses only at sites qualifying under WAC 173-340-706(1).

(b) **Standard Method C potable ground water cleanup levels.** Where the ground water cleanup level is based on a drinking water beneficial use and the site qualifies for a Method C ground water cleanup level, the standard Method C cleanup levels for ground water shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws, including the requirements in subsection (3)(b)(ii) of this section;

(ii) **Protection of surface water beneficial uses.** Concentrations established in accordance with the methods specified in WAC 173-340-730 for protecting surface water beneficial uses, unless it can be demonstrated that the hazardous substances are not likely to reach surface water. This demonstration must be based on factors other than implementation of a cleanup action at the site.

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based standards or criteria have not been established under applicable state and federal laws, those concentrations that protect human health as determined using the following methods:

(A) **Noncarcinogens.** Concentrations that are estimated to result in no significant acute or chronic toxic effects on human health and are estimated using Equation 720-1, except that the average body weight shall be 70 kg and the drinking water intake rate shall be 2 liters/day;

(B) **Carcinogens.** Concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand (1×10^{-5}), using Equation 720-2;

(C) **Petroleum mixtures.** Cleanup levels for petroleum mixtures shall be determined as specified in subsection (4)(b)(iii)(C) of this section except that the average body weight shall be 70 kg and the drinking water rate shall be 2 liters/day.

(c) **Modified Method C potable ground water cleanup levels.** Modified Method C ground water cleanup levels for drinking water beneficial uses are standard Method C ground water cleanup levels modified with chemical-specific or site-specific data. The same limitations and adjustments specified for modified Method B in subsection (4)(c) of this section apply to modified Method C ground water cleanup levels.

(d) **Using Modified Method C to evaluate ground water remediation levels.** In addition to the adjustments allowed under (c) of this subsection, other adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(6) **Cleanup levels for nonpotable ground water.**

(a) **Applicability.** Ground water cleanup levels may be established under this subsection only if the contaminated ground water is not classified as potable under subsection (2) of this section.

(b) **Requirements.** Cleanup levels shall be established in accordance with either of the following:

(i) The methods specified in subsections (3), (4) or (5) of this section, as applicable, for protection of drinking water beneficial uses; or

(ii) A site-specific risk assessment as provided for under (c) of this subsection for protection of other ground water beneficial uses.

(c) **Site-specific risk assessment.**

(i) **Method B site-specific ground water cleanup levels.** Where a site-specific risk assessment is used to establish a Method B ground water cleanup level under (b)(ii) of this subsection, the risk assessment shall conform to the requirements in WAC 173-340-702 and 173-340-708. The risk assessment shall evaluate all potential exposure pathways and ground water uses at the site, including potential impacts to persons engaged in site development or utility construction and maintenance activities. The risk assessment shall demonstrate the following:

(A) The cleanup levels will meet any applicable state and federal laws (drinking water standards are not applicable to these sites);

(B) The cleanup levels will result in no significant acute or chronic toxic effects on human health as demonstrated by not exceeding a hazard quotient of one (1) for individual hazardous substances;

(C) The cleanup levels will result in an upper bound on the estimated excess cancer risk that is less than or equal to one in one million (1×10^{-6}) for individual hazardous substances;

(D) For organic hazardous substances and petroleum products, the cleanup levels comply with the limitation on free product in subsection (7)(d) of this section;

(E) The cleanup levels will not exceed the surface water cleanup levels derived under WAC 173-340-730 at the ground water point of compliance or exceed the surface water or sediment quality standards at any point downstream, unless it can be demonstrated that the hazardous substances are not likely to reach surface water. This demonstration must be based on factors other than implementation of a cleanup action at the site; and

(F) Where it is demonstrated that hazardous substances are not likely to reach surface water, the use of a ground water cleanup level less stringent than a surface water cleanup level will not pose a threat to surface water through pathways that could result in ground water affected by the site entering surface water (such as use of the water for irrigation or discharges from foundation drains or utility corridors).

(ii) **Method C site-specific ground water cleanup levels.**

(A) **Applicability.** The department may approve of a site-specific Method C ground water cleanup level derived under (b)(ii) of this subsection only at sites qualifying under WAC 173-340-706(1).

(B) **Requirements.** Where a site-specific risk assessment is used to establish a Method C ground water cleanup level under (b)(ii) of this subsection, the site-specific risk assessment shall comply with the requirements in (c)(i) of this subsection except that the level of risk for individual carcinogens shall be one in one hundred thousand (1×10^{-5}).

(iii) **Limitations on the use of site-specific risk assessment.** If the site-specific risk assessment results in a Method B or Method C ground water cleanup level that exceeds the applicable potable ground water cleanup level derived under (b)(i) of this subsection, then the potable ground water cleanup level shall be used unless the following conditions are met:

(A) All potentially affected property owners, local governments, tribes and water purveyors with jurisdiction in the area potentially affected by the ground water contamination have been mailed a notice of the proposal and provided an opportunity to comment. The notice shall specifically ask for information on existing and planned uses of the ground water. The notice shall be in addition to any notice provided under WAC 173-340-600. In determining whether it is appropriate to use a cleanup level less stringent than the potable ground water cleanup level, the department will give greater weight to information based on an adopted or pending plan or similar preexisting document.

(B) For sites where the ground water is classified as nonpotable under WAC 173-340-720 (2)(d), the cleanup action includes institutional controls complying with WAC 173-340-440 that will prevent the use of contaminated ground water for drinking water purposes at any point between the source of hazardous substances and the point(s) of entry of ground water into the surface water.

(C) For sites where the risk assessment includes assumptions of restricted use or contact with the ground water (other than for the reason of being nonpotable), or restricted use of the land above the ground water, the cleanup action includes institutional controls complying with WAC 173-340-440 that will implement the restrictions.

(7) **Adjustments to cleanup levels.**

(a) **Total site risk adjustments.** Ground water cleanup levels for individual hazardous substances developed in accordance with subsection (4), (5) or (6) of this section, including those based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(b) **Adjustments to applicable state and federal laws.** Where a cleanup level developed under subsection (3), (4), (5), or (6) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level shall be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) **Natural background and PQL considerations.** Cleanup levels determined under subsection (3), (4), (5), or (6) of this section, including cleanup levels adjusted under subsection (7)(a) and (b) of this section, shall not be set at levels below the practical quantitation limit or natural background concentrations, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements pertaining to practical quantitation limits and natural background.

(d) **Nonaqueous phase liquid limitation.** For organic hazardous substances and total petroleum hydrocarbons, the cleanup level determined under subsection (3), (4), (5), or (6) shall not exceed a concentration that would result in nonaqueous phase liquid being present in or on the ground water. Physical observations of ground water at or above the cleanup level, such as the lack of a film, sheen, or discoloration of the ground water or lack of sludge or emulsion in the ground water, may be used to determine compliance with this requirement.

(8) **Point of compliance.**

(a) **Point of compliance defined.** For ground water, the point of compliance is the point or points where the ground water cleanup levels established under subsection (3), (4), (5), or (6) of this section must be attained for a site to be in compliance with the cleanup standards. Ground water cleanup levels shall be attained in all ground waters from the point of compliance to the outer boundary of the hazardous substance plume.

(b) **Standard point of compliance for all sites.** The standard point of compliance shall be established throughout the site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the site.

(c) **Conditional point of compliance.** Where it can be demonstrated under WAC 173-340-350 through 173-340-390 that it is not practicable to meet the cleanup level throughout the site within a reasonable restoration time frame, the department may approve a conditional point of compliance that shall be as close as practicable to the source of hazardous substances, and except as provided under (d) of this subsection, not to exceed the property boundary. Where a conditional point of compliance is proposed, the person responsible for undertaking the cleanup action shall demonstrate that all practicable methods of treatment are to be used in the site cleanup.

(d) **Off-property conditional point of compliance.** A conditional point of compliance shall not exceed the property boundary except in the three situations described below. In each of these three situations the person responsible for undertaking the cleanup action shall demonstrate that, in addition to making the demonstration required by (c) of this subsection, the following requirements are met:

(i) **Properties abutting surface water.** Where the ground water cleanup level is based on protection of surface water beneficial uses under subsection (3), (4), (5), or (6) of this section, and the property containing the source of contamination directly abuts the surface water, the department may approve a conditional point of compliance that is located within the surface water as close as technically possible to the point or points where ground water flows into the surface water subject to the following conditions:

(A) It has been demonstrated that the contaminated ground water is entering the surface water and will continue to enter the surface water even after implementation of the selected cleanup action;

(B) It has been demonstrated under WAC 173-340-350 through 173-340-390 that it is not practicable to meet the cleanup level at a point within the ground water before entering the surface water, within a reasonable restoration time frame;

(C) Use of a mixing zone under WAC 173-201A-100 to demonstrate compliance with surface water cleanup levels shall not be allowed;

(D) Ground water discharges shall be provided with all known available and reasonable methods of treatment before being released into surface waters;

(E) Ground water discharges shall not result in violations of sediment quality values published in chapter 173-204 WAC;

(F) Ground water and surface water monitoring shall be conducted to assess the long-term performance of the selected cleanup action including potential bioaccumulation problems resulting from surface water concentrations below method detection limits; and

(G) Before approving the conditional point of compliance, a notice of the proposal shall be mailed to the natural resource trustees, the Washington state department of natural resources and the United States Army Corps of Engineers. The notice shall be in addition to any notice provided under WAC 173-340-600 and invite comments on the proposal.

(ii) **Properties near, but not abutting, surface water.** Where the ground water cleanup level is based on protection of surface water beneficial uses under subsection (3), (4), (5),

or (6) of this section and the property that is the source of the contamination is located near, but does not directly abut, a surface water body, the department may approve a conditional point of compliance that is located as close as practicable to the source, not to exceed the point or points where the ground water flows into the surface water.

For a conditional point of compliance to be approved under this provision the conditions specified in (d)(i) of this section must be met and the affected property owners between the source of contamination and the surface water body must agree in writing to the use of the conditional point of compliance. Also, if the ground water cleanup level is not exceeded in the ground water prior to its entry into the surface water, the conditional point of compliance cannot extend beyond the extent of ground water contamination above the cleanup level at the time the department approves the conditional point of compliance.

(iii) **Area-wide conditional point of compliance.** As part of remedy selection, the department may approve an area-wide conditional point of compliance to address an area-wide ground water contamination problem. The area-wide conditional point(s) of compliance shall be as close as practicable to each source of hazardous substances, not to exceed the extent of ground water contamination at the time the department approves an area-wide conditional point of compliance.

This provision may be applied only at areas that are affected by hazardous substances released from multiple sources that have resulted in commingled plumes of contaminated ground water that are not practicable to address separately. A site may have more than one area-wide conditional point of compliance to address multiple sources and types of contaminants. An area-wide conditional point of compliance may be approved under this provision only if all of the following conditions have been met:

(A) The person conducting the cleanup action has complied with WAC 173-340-350 through 173-340-390, including a demonstration that it is not practicable to meet a point of compliance throughout the ground water contamination within a reasonable restoration time frame;

(B) A plan has been developed for implementation of the cleanup action, including a description of how any necessary access to the affected properties will be obtained;

(C) If the contaminated ground water is considered to be potable under WAC 173-340-720(2), current developments in the area encompassed by the area-wide conditional point of compliance and any other areas potentially affected by the ground water contamination are served by a public water system that obtains its water from an offsite source and it can be demonstrated that the water system has sufficient capacity to serve future development in these areas. This demonstration may be made by obtaining a written statement to this effect from the water system operator;

(D) All property owners, tribes, local governments, and water purveyors with jurisdiction in the area potentially affected by the ground water contamination, have been mailed a notice of the proposal to establish an area-wide conditional point of compliance and provided an opportunity to comment. The notice shall specifically ask for information on existing and planned uses of the ground water. The notice shall be in addition to any notice provided under WAC 173-340-600. The department will give greater weight to information based on an adopted or pending plan or similar preexisting document. When the department is providing technical assistance under WAC 173-340-515, the department shall also provide an opportunity to comment to the public through the *Site Register* before issuing a written opinion.

(E) Other conditions as determined by the department on a case-by-case basis.

(e) **Monitoring wells and surface water compliance.**

(i) The department may require or approve the use of upland monitoring wells located between the surface water and the source of contamination to establish compliance where a conditional point of compliance has been established under subsection (8)(d)(i) or (ii) of this section.

(ii) Where such monitoring wells are used, the department should consider an estimate of natural attenuation between the monitoring well and the point or points where ground water flows into the surface water in evaluating whether compliance has been achieved.

(iii) When evaluating how much, if any, natural attenuation will occur, the department shall consider site-specific factors including:

(A) Whether the ground water could reach the surface water in ways that would not provide for natural attenuation within the ground water flow system (such as short circuiting through high permeability zones, utility corridors or foundation drains); and

(B) Whether changes to the ground water chemistry due to natural attenuation processes would cause an exceedance of surface water or sediment quality standards.

(9) **Compliance monitoring.**

(a) When ground water cleanup levels have been established at a site, sampling of the ground water shall be conducted to determine if compliance with the ground water cleanup levels has been achieved. Compliance with ground water cleanup levels shall be determined by analysis of ground water samples representative of the ground water. Surface water analysis, bioassays or other biomonitoring methods may also be required where the ground water cleanup level is based on protection of surface water. Sampling and analytical procedures shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. The sample design shall provide data that are representative of the site.

(b) Analyses shall be conducted on unfiltered ground water samples, unless it can be demonstrated that a filtered sample provides a more representative measure of ground water quality. The department expects that filtering will generally be acceptable for iron and manganese and other naturally occurring inorganic substances where:

(i) A properly constructed monitoring well cannot be sufficiently developed to provide low turbidity water samples;

(ii) Due to the natural background concentration of hazardous substances in the aquifer material, unfiltered samples would not provide a representative measure of ground water quality; and

(iii) Filtering is performed in the field with all practicable measures taken to avoid exposing the ground water sample to the ambient air before filtering.

(c) The data analysis and evaluation procedures used to evaluate compliance with ground water cleanup levels shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. These procedures shall meet the following general requirements:

(i) Methods of data analysis shall be consistent with the sampling design;

(ii) When cleanup levels are based on requirements specified in applicable state and federal laws, the procedures for evaluating compliance that are specified in those requirements shall be used to evaluate compliance with cleanup levels unless those procedures conflict with the intent of this section;

(iii) Where procedures for evaluating compliance are not specified in an applicable state and federal law, statistical methods used shall be appropriate for the distribution of sampling data for each hazardous substance. If the distributions for hazardous substances differ, more than one statistical method may be required;

(iv) Compliance with ground water cleanup levels shall be determined for each ground water monitoring well or other monitoring points such as a spring;

(v) The data analysis procedures identified in the compliance monitoring plan shall specify the statistical parameters to be used to determine compliance with ground water cleanup levels.

(A) For cleanup levels based on short-term or acute toxic effects on human health or the environment, an upper percentile concentration shall be used to evaluate compliance with ground water cleanup levels.

(B) For cleanup levels based on chronic or carcinogenic threats, the true mean concentration shall be used to evaluate compliance with ground water cleanup levels.

(vi) When active ground water restoration is performed, or containment technologies are used that incorporate active pumping of ground water, compliance with ground water cleanup levels shall be determined when the ground water characteristics at the site are no longer influenced by the cleanup action.

(d) When data analysis procedures for evaluating compliance are not specified in an applicable state or federal law, the following procedures shall be used:

(i) A confidence interval approach that meets the following requirements:

(A) The upper one-sided ninety-five percent confidence limit on the true mean ground water concentration shall be less than the ground water cleanup level. For lognormally distributed data, the upper one-sided ninety-five percent confidence limit shall be calculated using Land's method; and

(B) Data shall be assumed to be lognormally distributed unless this assumption is rejected by a statistical test. If a lognormal distribution is inappropriate, data shall be assumed to be normally distributed unless this assumption is rejected by a statistical test. The W test, D'Agostino's test, or, censored probability plots, as appropriate for the data, shall be the statistical methods used to determine whether the data is lognormally or normally distributed.

(ii) Evaluations conducted under subsection (9)(c)(v)(A) of this subsection may use a parametric test for percentiles based on tolerance intervals to test the proportion of ground water samples having concentrations less than the ground water cleanup level. When using this method, the true proportion of samples that do not exceed the ground water cleanup level shall not be less than ninety percent. Statistical tests shall be performed with a Type I error level of 0.05; or

(iii) Other statistical methods approved by the department.

(e) All data analysis methods used, including those specified in state or federal law, must meet the following requirements:

(i) No single sample concentration shall be greater than two times the ground water cleanup level. Higher exceedances to control false positive error rates at five percent may be approved by the department when the cleanup level is based on background concentrations; and

(ii) Less than ten percent of the sample concentrations shall exceed the ground water cleanup level during a representative sampling period. Higher exceedances to control false positive error rates at five percent may be approved by the department when the cleanup level is based on background concentrations; and

(f) When using statistical methods to demonstrate compliance with ground water cleanup levels, the following procedures shall be used for measurements below the practical quantitation limit:

(i) Measurements below the method detection limit shall be assigned a value equal to one-half the method detection limit when not more than fifteen percent of the measurements are below the practical quantitation limit.

(ii) Measurements above the method detection limit but below the practical quantitation limit shall be assigned a value equal to the method detection limit when not more than fifteen percent of the measurements are below the practical quantitation limit.

(iii) When between fifteen and fifty percent of the measurements are below the practical quantitation limit and the data are assumed to be lognormally or normally distributed, Cohen's method shall be used to calculate a corrected mean and standard deviation for use in calculating an upper confidence limit on the true mean ground water concentration.

(iv) If more than fifty percent of the measurements are below the practical quantitation limit, the largest value in the data set shall be used in place of an upper confidence limit on the true mean ground water calculation.

(v) If a hazardous substance or petroleum fraction has never been detected in any sample at a site and these substances are not suspected of being present at the site based on site history and other knowledge, that hazardous substance or petroleum fraction may be excluded from the statistical analysis.

(vi) The department may approve alternate statistical procedures for handling nondetected values or values below the practical quantitation limit.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-720, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-720, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-730 Surface water cleanup standards.

(1) **General considerations.**

(a) Surface water cleanup levels shall be based on estimates of the highest beneficial use and the reasonable maximum exposure expected to occur under both current and potential future site use conditions. The classification and the highest beneficial use of a surface water body, determined in accordance with chapter 173-201A WAC, shall be used to establish the reasonable maximum exposure for that water body. Surface water cleanup levels shall use this presumed exposure scenario and shall be established in accordance with this section.

(b) In the event of a release of a hazardous substance to surface water from a site, a cleanup action that complies with this chapter shall be conducted to address all areas of the site where the concentration of the hazardous substances in the surface water exceeds cleanup levels.

(c) Surface water cleanup levels established under this section apply to those surface waters of the state affected or potentially affected by releases of hazardous substances from sites addressed under this chapter. The department does not expect that cleanup standards will be applied to storm water runoff that is in the process of being conveyed to a treatment system.

(d) Surface water cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of ground water, soil, sediment, or air cleanup standards established under this chapter or other applicable state and federal laws. A site that qualifies for a Method C surface water cleanup level under this section does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(e) The department may require more stringent cleanup levels than specified in this section where necessary to protect other beneficial uses or otherwise protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(2) **Method A surface water cleanup levels.**

(a) **Applicability.** Method A surface water cleanup levels may only be used at sites that qualify under WAC 173-340-704(1).

(b) **General requirements.** Method A surface water cleanup levels shall be at least as stringent as all of the following:

(i) Concentrations established under applicable state and federal laws, including the following requirements:

(A) All water quality criteria published in the water quality standards for surface waters of the state of Washington, chapter 173-201A WAC, as amended;

(B) Water quality criteria based on the protection of aquatic organisms (acute and chronic criteria) and human health published under section 304 of the Clean Water Act.

(C) National toxics rule (40 C.F.R. Part 131);

(ii) For surface waters that are classified as suitable for use as a domestic water supply under chapter 173-201A (excluding marine waters), concentrations derived using the methods specified in WAC 173-340-720 for drinking water beneficial uses; and

(iii) For a hazardous substance deemed an indicator hazardous substance for surface water under WAC 173-340-708(2) and for which there is no value in applicable state and federal laws, a concentration that does not exceed the natural background concentration or the practical quantitation limit, subject to the limitations in this chapter.

(3) **Method B surface water cleanup levels.**

(a) **Applicability.** Method B surface water cleanup levels consist of standard and modified cleanup levels as described in this subsection. Either standard or modified Method B surface water cleanup levels may be used at any site.

(b) **Standard Method B surface water cleanup levels.** Standard Method B cleanup levels for surface waters shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws, including the following requirements:

(A) All water quality criteria published in the water quality standards for surface waters of the state of Washington, chapter 173-201A WAC;

(B) Water quality criteria based on the protection of aquatic organisms (acute and chronic criteria) and human health published under section 304 of the Clean Water Act unless it can be demonstrated that such criteria are not relevant and appropriate for a specific surface water body or hazardous substance; and

(C) National toxics rule (40 C.F.R. Part 131);

(ii) **Environmental effects.** For hazardous substances for which environmental effects-based concentrations have not been established under applicable state or federal laws, concentrations that are estimated to result in no adverse effects on the protection and propagation of wildlife, fish, and other aquatic life. Whole effluent toxicity testing using the protocols described in chapter 173-205 WAC may be used to make this demonstration for fish and aquatic life;

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations that protect human health as determined by the following methods:

(A) **Noncarcinogens.** For surface waters that support or have the potential to support fish or shellfish populations, concentrations which are estimated to result in no acute or chronic toxic effects on human health as determined using Equation 730-1.

[Equation 730-1]

$$\text{Surface water cleanup level (ug/l)} = \frac{\text{RfD} \times \text{ABW} \times \text{UCF1} \times \text{UCF2} \times \text{HQ} \times \text{AT}}{\text{BCF} \times \text{FCR} \times \text{FDF} \times \text{ED}}$$

Where:

RfD =	Reference dose as specified in WAC 173-340-708(7) (mg/kg-day)
ABW =	Average body weight during the exposure duration (70 kg)
UCF1 =	Unit conversion factor (1,000 ug/mg)
UCF2 =	Unit conversion factor (1,000 grams/liter)
BCF =	Bioconcentration factor as defined in WAC 173-340-708(9) (liters/kilogram)
FCR =	Fish consumption rate (54 grams/day)
FDF =	Fish diet fraction (0.5) (unitless)

HQ = Hazard quotient (1) (unitless)
AT = Averaging time (30 years)
ED = Exposure duration (30 years)

(B) **Carcinogens.** For surface waters which support or have the potential to support fish or shellfish populations, concentrations that are estimated to result in an excess cancer risk less than or equal to one in one million (1×10^{-6}) as determined using Equation 730-2.

[Equation 730-2]

$$\text{Surface water cleanup level (ug/l)} = \frac{\text{RISK} \times \text{ABW} \times \text{AT} \times \text{UCF1} \times \text{UCF2}}{\text{CPF} \times \text{BCF} \times \text{FCR} \times \text{FDF} \times \text{ED}}$$

Where:
CPF = Carcinogenic potency factor as specified in WAC 173-340-708(8) (kg-day/mg)
RISK = Acceptable cancer risk level (1 in 1,000,000) (unitless)
ABW = Average body weight during the exposure duration (70 kg)
AT = Averaging time (75 years)
UCF1 = Unit conversion factor (1,000 ug/mg)
UCF2 = Unit conversion factor (1,000 grams/liter)
BCF = Bioconcentration factor as defined in WAC 173-340-708(9) (liters/kilogram)
FCR = Fish consumption rate (54 grams/day)
FDF = Fish diet fraction (0.5) (unitless)
ED = Exposure duration (30 years)

(C) **Petroleum mixtures.** For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated using Equation 730-1 and by taking into account the additive effects of the petroleum fractions and volatile hazardous substances present in the petroleum mixture. As an alternative to this calculation, the total petroleum hydrocarbon cleanup levels in Table 720-1 may be used. Cleanup levels for other noncarcinogens and known or suspected carcinogens within the petroleum mixture shall be calculated using Equations 730-1 and 730-2. See Table 830-1 for the analyses required for various petroleum products to use this method; and

(iv) **Drinking water considerations.** For surface waters that are classified as suitable for use as a domestic water supply under chapter 173-201A WAC, concentrations derived using the methods specified in WAC 173-340-720 for drinking water beneficial uses.

(c) **Modified Method B surface water cleanup levels.** Modified Method B surface water cleanup levels are standard Method B surface water cleanup levels modified with chemical-specific or site-specific data. When making these adjustments, the resultant cleanup levels shall meet applicable state and federal laws and health risk levels required for standard Method B surface water cleanup levels. Changes to exposure assumptions must comply with WAC 173-340-708(10). The following adjustments may be made to the default assumptions in the standard Method B equations to derive modified Method B surface water cleanup levels:

(i) Adjustments to the reference dose and cancer potency factor may be made if the requirements in WAC 173-340-708 (7) and (8) are met;

(ii) Adjustments to the bioconcentration factor may be made if the requirements in WAC 173-340-708(9) are met;

(iii) Where a numeric environmental effects-based water quality standard does not exist, bioassays that use methods other than those specified in chapter 173-205 WAC may be approved by the department to establish concentrations for the protection of fish and other aquatic life;

(iv) The toxicity equivalency factor procedures described in WAC 173-340-708(8) may be used for assessing the potential carcinogenic risk of mixtures of chlorinated dibenzo-p-dioxins, chlorinated dibenzofurans and polycyclic aromatic hydrocarbons; and

(v) Modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16).

(d) **Using modified Method B to evaluate surface water remediation levels.** In addition to the adjustments allowed under subsection (3)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(4) **Method C surface water cleanup levels.**

(a) **Applicability.** Method C surface water cleanup levels consist of standard and modified cleanup levels as described in this subsection. Either standard or modified Method C cleanup levels may be approved by the department if the person undertaking the cleanup action can demonstrate that such levels are consistent with applicable state and federal laws, that all practicable methods of treatment have been used, that institutional controls are implemented in accordance with WAC 173-340-440, and that one or more of the conditions in WAC 173-340-706(1) exist.

(b) **Standard Method C surface water cleanup levels.** Method C cleanup levels for surface waters shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws, including the requirements identified in subsection (3)(b)(i) of this section;

(ii) **Environmental effects.** For hazardous substances for which an environmental effects based concentration has not been established under applicable state or federal laws, those concentrations which are estimated to result in no significant adverse effects on the protection and propagation of wildlife, fish and other aquatic life. Whole effluent toxicity testing using the protocols described in chapter 173-205 WAC may be used to make this demonstration for fish and aquatic life;

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which protect human health as determined by the following methods:

(A) **Noncarcinogens.** For surface waters that support or have the potential to support fish or shellfish populations, concentrations that are estimated to result in no significant acute or chronic toxic effects on human health and are estimated in accordance with Equation 730-1 except that the fish diet fraction shall be twenty percent (0.2);

(B) **Carcinogens.** For surface waters that support or have the potential to support fish or shellfish populations, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred

thousand (1 x 10^{-5}) and are estimated in accordance with Equation 730-2 except that the fish diet fraction shall be twenty percent (0.2);

(C) **Petroleum mixtures.** Cleanup levels for petroleum mixtures shall be calculated as specified in subsection (3)(b)(iii)(C) of this section, except that the fish diet fraction shall be twenty percent (0.2); and

(iv) **Drinking water considerations.** For surface waters that are classified as suitable for use as a domestic water supply under chapter 173-201A WAC, concentrations derived using the methods specified for drinking water beneficial uses in WAC 173-340-720.

(c) **Modified Method C surface water cleanup levels.** Modified Method C surface water cleanup levels are standard Method C surface water cleanup levels modified with chemical-specific or site-specific data. The same limitations and adjustments specified for modified Method B in subsection (3)(c) of this section apply to modified Method C surface water cleanup levels.

(d) **Using modified Method C to evaluate surface water remediation levels.** In addition to the adjustments allowed under subsection (4)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(5) **Adjustments to cleanup levels.**

(a) **Total site risk adjustments.** Surface water cleanup levels for individual hazardous substances developed in accordance with subsections (3) and (4) of this section, including those based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) and the total excess cancer risk would exceed one in one hundred thousand (1 x 10^{-5}). These adjustments shall be made in accordance with the procedures specified in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1 x 10^{-5}).

(b) **Adjustments to applicable state and federal laws.** Where a cleanup level developed under subsection (2), (3) or (4) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1 x 10^{-5}) or a hazard index of one (1), the cleanup level shall be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1 x 10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) **Natural background and PQL considerations.** Cleanup levels determined under subsections (2), (3) and (4) of this section, including cleanup levels adjusted under subsection (5)(a) and (b) of this subsection, shall not be set at levels below the practical quantitation limit or natural background concentration, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements pertaining to practical quantitation limits and natural background concentrations.

(d) **Nonaqueous phase liquid limitation.** For organic hazardous substances and petroleum hydrocarbons, the cleanup level shall not exceed a concentration that would result in nonaqueous phase liquid being present in or on the surface water. Physical observations of surface water at or above the cleanup level, such as the lack of a film, sheen, discoloration, sludge or emulsion in the surface water or adjoining shoreline, may be used to determine compliance with this requirement.

(6) **Point of compliance.**

(a) The point of compliance for the surface water cleanup levels shall be the point or points at which hazardous substances are released to surface waters of the state unless the department has authorized a mixing zone in accordance with chapter 173-201A WAC.

(b) Where hazardous substances are released to the surface water as a result of ground water flows, no mixing zone shall be allowed to demonstrate compliance with surface water cleanup levels. See WAC 173-340-720 (8)(d) for additional requirements for sites where contaminated ground water is flowing into surface water.

(c) As used in this subsection, "mixing zone" means that portion of a surface water body adjacent to an effluent outfall where mixing results in dilution of the effluent with the receiving water. See chapter 173-201A WAC for additional information on mixing zones.

(7) **Compliance monitoring.**

(a) When surface water cleanup levels have been established at a site, sampling of the surface water shall be conducted to determine if compliance with the surface water cleanup levels has been achieved. Sampling and analytical procedures shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. The sample design shall provide data that are representative of the site.

(b) The data analysis and evaluation procedures used to evaluate compliance with surface water cleanup levels shall be defined in a compliance monitoring plan prepared under WAC 173-340-410.

(c) Compliance with surface water cleanup standards shall be determined by analyses of unfiltered surface water samples, unless it can be demonstrated that a filtered sample provides a more representative measure of surface water quality.

(d) When surface water cleanup levels are based on requirements specified in applicable state and federal laws, the procedures for evaluating compliance that are specified in those requirements shall be used to evaluate compliance with surface water cleanup levels unless those procedures conflict with the intent of this section.

(e) Where procedures for evaluating compliance are not specified in an applicable state and federal law, compliance with surface water cleanup levels shall be evaluated using procedures approved by the department. Where statistical methods are used to evaluate compliance, the statistical methods shall be appropriate for the distribution of the hazardous substance sampling data. If the distribution of the hazardous substance sampling data is inappropriate for statistical methods based on a normal distribution, then the data may be

transformed. If the distributions of individual hazardous substances differ, more than one statistical method may be required.

(f) Sampling and analysis of fish tissue, shellfish, or other aquatic organisms and sediments may be required to supplement water column sampling during compliance monitoring.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-730, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-730, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-740 Unrestricted land use soil cleanup standards. (1) General considerations.

(a) Presumed exposure scenario soil cleanup levels shall be based on estimates of the reasonable maximum exposure expected to occur under both current and future site use conditions. The department has determined that residential land use is generally the site use requiring the most protective cleanup levels and that exposure to hazardous substances under residential land use conditions represents the reasonable maximum exposure scenario. Unless a site qualifies for use of an industrial soil cleanup level under WAC 173-340-745, soil cleanup levels shall use this presumed exposure scenario and be established in accordance with this section.

(b) In the event of a release of a hazardous substance to the soil at a site, a cleanup action complying with this chapter shall be conducted to address all areas where the concentration of hazardous substances in the soil exceeds cleanup levels at the relevant point of compliance.

(c) The department may require more stringent soil cleanup standards than required by this section where, based on a site-specific evaluation, the department determines that this is necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708. The following are examples of situations that may require more stringent cleanup levels.

(i) Concentrations that eliminate or substantially reduce the potential for food chain contamination;

(ii) Concentrations that eliminate or substantially reduce the potential for damage to soils or biota in the soils which could impair the use of soils for agricultural or silvicultural purposes;

(iii) Concentrations necessary to address the potential health risk posed by dust at a site;

(iv) Concentrations necessary to protect the ground water at a particular site;

(v) Concentrations necessary to protect nearby surface waters from hazardous substances in runoff from the site; and

(vi) Concentrations that eliminate or minimize the potential for the accumulation of vapors in buildings or other structures.

(d) Relationship between soil cleanup levels and other cleanup standards. Soil cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of ground water, surface water, sediment, or air cleanup standards established under this chapter or applicable state and federal laws. A property that qualifies for a Method C soil cleanup level under WAC 173-340-745 does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(2) **Method A soil cleanup levels for unrestricted land use.**

(a) **Applicability.** Method A soil cleanup levels may only be used at sites qualifying under WAC 173-340-704(1).

(b) **General requirements.** Method A soil cleanup levels shall be at least as stringent as all of the following:

(i) Concentrations in Table 740-1 and compliance with the corresponding footnotes;

(ii) Concentrations established under applicable state and federal laws;

(iii) Concentrations that result in no significant adverse effects on the protection and propagation of terrestrial ecological receptors using the procedures specified in WAC 173-340-7490 through 173-340-7493, unless it is demonstrated under those sections that establishing a soil concentration is unnecessary; and

(iv) For a hazardous substance that is deemed an indicator hazardous substance under WAC 173-340-708(2) and for which there is no value in Table 740-1 or applicable state and federal laws, a concentration that does not exceed the natural background concentration or the practical quantification limit, subject to the limitations in this chapter.

(3) **Method B soil cleanup levels for unrestricted land use.**

(a) **Applicability.** Method B soil cleanup levels consist of standard and modified cleanup levels determined using the procedures in this subsection. Either standard or modified Method B soil cleanup levels may be used at any site.

(b) **Standard Method B soil cleanup levels.** Standard Method B cleanup levels for soils shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws;

(ii) **Environmental protection.** Concentrations that result in no significant adverse effects on the protection and propagation of terrestrial ecological receptors established using the procedures specified in WAC 173-340-7490 through 173-340-7494 unless it is demonstrated under those sections that establishing a soil concentration is unnecessary.

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations that protect human health as determined by evaluating the following exposure pathways:

(A) **Ground water protection.** Concentrations that will not cause contamination of ground water at levels which exceed ground water cleanup levels established under WAC 173-340-720 as determined using the methods described in WAC 173-340-747.

(B) **Soil direct contact.** Concentrations that, due to direct contact with contaminated soil, are estimated to result in no acute or chronic noncarcinogenic toxic effects on human health using a hazard quotient of one (1) and concentrations for which the upper bound on the estimated excess

cancer risk is less than or equal to one in one million (1 x 10^{-6}). Equations 740-1 and 740-2 and the associated default assumptions shall be used to calculate the concentration for direct contact with contaminated soil.

(I) **Noncarcinogens.** For noncarcinogenic toxic effects of hazardous substances due to soil ingestion, concentrations shall be determined using Equation 740-1. For petroleum mixtures and components of such mixtures, see (b)(iii)(B)(III) of this subsection.

[Equation 740-1]

$$\text{Soil Cleanup Level (mg/kg)} = \frac{\text{RfD x ABW x UCF x HQ x AT}}{\text{SIR x AB1 x EF x ED}}$$

Where:

RfD	=	Reference dose as defined in WAC 173-340-708(7) (mg/kg-day)
ABW	=	Average body weight over the exposure duration (16 kg)
UCF	=	Unit conversion factor (1,000,000 mg/kg)
SIR	=	Soil ingestion rate (200 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless)
EF	=	Exposure frequency (1.0) (unitless)
HQ	=	Hazard quotient (1) (unitless)
AT	=	Averaging time (6 years)
ED	=	Exposure duration (6 years)

(II) **Carcinogens.** For carcinogenic effects of hazardous substances due to soil ingestion, concentrations shall be determined using Equation 740-2. For petroleum mixtures and components of such mixtures, see (b)(iii)(B)(III) of this subsection.

[Equation 740-2]

$$\text{Soil Cleanup Level (mg/kg)} = \frac{\text{RISK x ABW x AT x UCF}}{\text{CPF x SIR x AB1 x ED x EF}}$$

Where:

RISK	=	Acceptable cancer risk level (1 in 1,000,000) (unitless)
ABW	=	Average body weight over the exposure duration (16 kg)
AT	=	Averaging time (75 years)
UCF	=	Unit conversion factor (1,000,000 mg/kg)
CPF	=	Carcinogenic potency factor as defined in WAC 173-340-708(8) (kg-day/mg)
SIR	=	Soil ingestion rate (200 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless)
ED	=	Exposure duration (6 years)
EF	=	Exposure frequency (1.0) (unitless)

(III) **Petroleum mixtures.** For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated taking into account the additive effects of the petroleum fractions and volatile organic compounds substances present in the petroleum mixture. Equation 740-3 shall be used for this calculation. This equation takes into account concurrent exposure due to ingestion and dermal contact with petroleum contaminated soils. Cleanup levels for other noncarcinogens and known or suspected carcinogens within the petroleum mixture shall be calculated using Equations 740-4 and 740-5. See Table 830-1 for the analyses required for various petroleum products to use this method.

[Equation 740-3]

$$C_{soil} = \frac{HI \times ABW \times AT}{EF \times ED\left[\left(\frac{SIR \times AB1}{10^6 mg/kg}\sum_{i=1}^{n}\frac{F(i)}{RfDo(i)}\right)+\left(\frac{SA \times AF}{10^6 mg/kg}\sum_{i=1}^{n}\frac{F(i)\times ABS(i)}{RfDd(i)}\right)\right]}$$

Where:

C_{soil} =	TPH soil cleanup level (mg/kg)
HI =	Hazard index (1) (unitless)
ABW =	Average body weight over the exposure duration (16 kg)
AT =	Averaging time (6 years)
EF =	Exposure frequency (1.0) (unitless)
ED =	Exposure duration (6 years)
SIR =	Soil ingestion rate (200 mg/day)
AB1 =	Gastrointestinal absorption fraction (1.0) (unitless)
F(i) =	Fraction (by weight) of petroleum component (i) (unitless)
SA =	Dermal surface area (2,200 cm^2)
AF =	Adherence factor (0.2 mg/cm^2-day)
ABS =	Dermal absorption fraction for petroleum component (i) (unitless). May use chemical-specific values or the following defaults:
	• 0.0005 for volatile petroleum components with vapor press > = benzene
	• 0.03 for volatile petroleum components with vapor press < benzene
	• 0.1 for other petroleum components
RfDo(i) =	Oral reference dose of petroleum component (i) as defined in WAC 173-340-708(7) (mg/kg-day)
RfDd(i) =	Dermal reference dose for petroleum component (i) (mg/kg-day) derived by RfDo x GI
GI =	Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults:
	• 0.8 for volatile petroleum components
	• 0.5 for other petroleum components
n =	The number of petroleum components (petroleum fractions plus volatile organic compounds with an RfD) present in the petroleum mixture. (See Table 830-1.)

(C) **Soil vapors.** The soil to vapor pathway shall be evaluated for volatile organic compounds whenever any of the following conditions exist:

(I) For gasoline range organics, whenever the total petroleum hydrocarbon (TPH) concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(6) using the default assumptions;

(II) For diesel range organics, whenever the total petroleum hydrocarbon (TPH) concentration is greater than 10,000 mg/kg;

(III) For other volatile organic compounds, including petroleum components, whenever the concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(4).

See subsection (3)(c)(iv)(B) of this section for methods that may be used to evaluate the soil to vapor pathway.

(c) **Modified Method B soil cleanup levels.**

(i) **General.** Modified Method B soil cleanup levels are standard Method B soil cleanup levels, modified with chemical-specific or site-specific data. When making these modifications, the resultant cleanup levels shall meet applicable state and federal laws, meet health risk levels for standard Method B soil cleanup levels, and be demonstrated to be environmentally protective using the procedures specified in

WAC 173-340-7490 through 173-340-7494. Changes to exposure assumptions must comply with WAC 173-340-708(10).

(ii) **Allowable modifications.** The following modifications can be made to the default assumptions in the standard Method B equations to derive modified Method B soil cleanup levels:

(A) For the protection of ground water, see WAC 173-340-747;

(B) For soil ingestion, the gastrointestinal absorption fraction, may be modified if the requirements of WAC 173-340-702 (14), (15), (16), and 173-340-708(10) are met;

(C) For dermal contact, the adherence factor, dermal absorption fraction and gastrointestinal absorption conversion factor may be modified if the requirements of WAC 173-340-702 (14), (15), (16), and 173-340-708(10) are met;

(D) Toxicity equivalent factors, as described in WAC 173-340-708(8), may be used for assessing the potential carcinogenic risk of mixtures of chlorinated dibenzo-p-dioxins, chlorinated dibenzofurans and polycyclic aromatic hydrocarbons;

(E) The reference dose and cancer potency factor may be modified if the requirements in WAC 173-340-708 (7) and (8) are met; and

(F) Other modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16).

(iii) **Dermal contact.** For hazardous substances other than petroleum mixtures, dermal contact with the soil shall be evaluated whenever the proposed changes to Equations 740-1 or 740-2 would result in a significantly higher soil cleanup level than would be calculated without the proposed changes. When conducting this evaluation, the following equations and default assumptions shall be used.

(A) For noncarcinogens use Equation 740-4. This equation takes into account concurrent exposure due to ingestion and dermal contact with soil.

[Equation 740-4]

$$C_{soil} = \frac{HQ \times ABW \times AT}{EF \times ED\left[\left(\frac{1}{RfDo} \times \frac{SIR \times AB1}{10^6 mg/kg}\right) + \left(\frac{1}{RfDd} \times \frac{SA \times AF \times ABS}{10^6 mg/kg}\right)\right]}$$

Where:

C_{soil} = Soil cleanup level (mg/kg)
HQ = Hazard quotient (unitless)
ABW = Average body weight over the exposure duration (16 kg)
AT = Averaging time (6 years)
EF = Exposure frequency (1.0) (unitless)
ED = Exposure duration (6 years)
SIR = Soil ingestion rate (200 mg/day)
AB1 = Gastrointestinal absorption fraction (1.0) (unitless)
SA = Dermal surface area (2,200 cm^2)
AF = Adherence factor (0.2 mg/cm^2-day)
ABS = Dermal absorption fraction (unitless). May use chemical-specific values or the following defaults:
- 0.01 for inorganic hazardous substances
- 0.0005 for volatile organic compounds with vapor press >= benzene
- 0.03 for volatile organic compounds with vapor press < benzene
- 0.1 for other organic hazardous substances

RfDo = Oral reference dose as defined in WAC 173-340-708(7) (mg/kg-day)
RfDd = Dermal reference dose (mg/kg-day) derived by RfDo x GI
GI = Gastrointestinal absorption conversion factor (unitless). May use chemical specific values or the following defaults:
- 0.2 for inorganic hazardous substances
- 0.8 for volatile organic compounds
- 0.5 for other organic hazardous substances

(B) For carcinogens use Equation 740-5. This equation takes into account concurrent exposure due to ingestion and dermal contact with soil.

[Equation 740-5]

$$C_{soil} = \frac{RISK \times ABW \times AT}{EF \times ED\left[\left(\frac{SIR \times AB1 \times CPFo}{10^6 mg/kg}\right) + \left(\frac{SA \times AF \times ABS \times CPFd}{10^6 mg/kg}\right)\right]}$$

Where:

C_{soil} = Soil cleanup level (mg/kg)
RISK = Acceptable cancer risk (1 in 1,000,000) (unitless)
ABW = Average body weight over the exposure duration (16 kg)
AT = Averaging time (75 years)
EF = Exposure frequency (1.0) (unitless)
ED = Exposure duration (6 years)
SIR = Soil ingestion rate (200 mg/day)
AB1 = Gastrointestinal absorption fraction (1.0) (unitless)
CPFo = Oral cancer potency factor as defined in WAC 173-340-708(8) (kg-day/mg)
CPFd = Dermal cancer potency factor (kg-day/mg) derived by CPFo/GI
GI = Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults:
- 0.2 for inorganic hazardous substances
- 0.8 for volatile organic compounds
- 0.5 for other organic hazardous substances

SA = Dermal surface area (2,200 cm^2)
AF = Adherence factor (0.2 mg/cm^2-day)
ABS = Dermal absorption fraction (unitless). May use chemical-specific values or the following defaults:
- 0.01 for inorganic hazardous substances
- 0.0005 for volatile organic compounds with vapor press >= benzene
- 0.03 for volatile organic compounds with vapor press < benzene
- 0.1 for other organic hazardous substances

(C) Modifications may be made to Equations 740-4 and 740-5 as provided for in subsection (3)(c)(ii) of this section.

(iv) **Soil vapors.**

(A) **Applicability.** The soil to vapor pathway shall be evaluated for volatile organic compounds whenever any of the following conditions exist:

(I) For other than petroleum hydrocarbon mixtures, the proposed changes to the standard Method B equations (Equations 740-1 and 740-2) or default values would result in a significantly higher soil cleanup level than would be calculated without the proposed changes;

(II) For petroleum hydrocarbon mixtures, the proposed changes to the standard Method B equations (Equations 740-3, 740-4 and 740-5) or default values would result in a significantly higher soil cleanup level than would be calculated without the proposed changes;

(III) For gasoline range organics, whenever the total petroleum hydrocarbon (TPH) concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(6) using the default assumptions;

(IV) For diesel range organics, whenever the total petroleum hydrocarbon (TPH) concentration is greater than 10,000 mg/kg;

(V) For other volatile organic compounds, including petroleum components, whenever the concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(4).

(B) **Evaluation methods.** Soil cleanup levels that are protective of the indoor and ambient air shall be determined on a site-specific basis. Soil cleanup levels may be evaluated as being protective of air pathways using any of the following methods:

(I) Measurements of the soil vapor concentrations, using methods approved by the department, demonstrating vapors in the soil would not exceed air cleanup levels established under WAC 173-340-750.

(II) Measurements of ambient air concentrations and/or indoor air vapor concentrations throughout buildings, using methods approved by the department, demonstrating air does not exceed cleanup levels established under WAC 173-340-750. Such measurements must be representative of current and future site conditions when vapors are likely to enter and accumulate in structures. Measurement of ambient air may be excluded if it can be shown that indoor air is the most protective point of exposure.

(III) Use of modeling methods approved by the department to demonstrate the air cleanup standards established under WAC 173-340-750 will not be exceeded. When this method is used, the department may require soil vapor and/or air monitoring to be conducted to verify the calculations and compliance with air cleanup standards.

(IV) Other methods as approved by the department demonstrating the air cleanup standards established under WAC 173-340-750 will not be exceeded.

(d) **Using modified Method B to evaluate soil remediation levels.** In addition to the adjustments allowed under subsection (3)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(4) **Method C soil cleanup levels.** This section does not provide procedures for establishing Method C soil cleanup levels. Except for qualifying industrial properties, Method A and Method B, as described in this section, are the only methods available for establishing soil cleanup levels at sites. See WAC 173-340-745 for use of Method C soil cleanup levels at qualifying industrial properties. See also WAC 173-340-357 and 173-340-708 (3)(d) for how land use may be considered when selecting a cleanup action at a site.

(5) **Adjustments to cleanup levels.**

(a) **Total site risk adjustments.** Soil cleanup levels for individual hazardous substances developed in accordance with subsection (3) of this section, including cleanup levels based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures specified in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(b) **Adjustments to applicable state and federal laws.** Where a cleanup level developed under subsection (2) or (3) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level must be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) **Natural background and PQL considerations.** Cleanup levels determined under subsection (2) or (3) of this section, including cleanup levels adjusted under subsection (5)(a) and (b) of this section, shall not be set at levels below the practical quantitation limit or natural background, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements pertaining to practical quantitation limits and natural background.

(6) **Point of compliance.**

(a) The point of compliance is the point or points where the soil cleanup levels established under subsection (2) or (3) of this section shall be attained.

(b) For soil cleanup levels based on the protection of ground water, the point of compliance shall be established in the soils throughout the site.

(c) For soil cleanup levels based on protection from vapors, the point of compliance shall be established in the soils throughout the site from the ground surface to the uppermost ground water saturated zone (e.g., from the ground surface to the uppermost water table).

(d) For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance shall be established in the soils throughout the site from the ground surface to fifteen feet below the ground surface. This represents a reasonable estimate of the depth of soil that could be excavated and distributed at the soil surface as a result of site development activities.

(e) For soil cleanup levels based on ecological considerations, see WAC 173-340-7490 for the point of compliance.

(f) The department recognizes that, for those cleanup actions selected under this chapter that involve containment of hazardous substances, the soil cleanup levels will typically not be met at the points of compliance specified in (b) through (e) of this subsection. In these cases, the cleanup

action may be determined to comply with cleanup standards, provided:

(i) The selected remedy is permanent to the maximum extent practicable using the procedures in WAC 173-340-360;

(ii) The cleanup action is protective of human health. The department may require a site-specific human health risk assessment conforming to the requirements of this chapter to demonstrate that the cleanup action is protective of human health;

(iii) The cleanup action is demonstrated to be protective of terrestrial ecological receptors under WAC 173-340-7490 through 173-340-7494;

(iv) Institutional controls are put in place under WAC 173-340-440 that prohibit or limit activities that could interfere with the long-term integrity of the containment system;

(v) Compliance monitoring under WAC 173-340-410 and periodic reviews under WAC 173-340-430 are designed to ensure the long-term integrity of the containment system; and

(vi) The types, levels and amount of hazardous substances remaining on-site and the measures that will be used to prevent migration and contact with those substances are specified in the draft cleanup action plan.

(7) **Compliance monitoring.**

(a) Compliance with soil cleanup levels shall be based on total analyses of the soil fraction less than two millimeters in size. When it is reasonable to expect that larger soil particles could be reduced to two millimeters or less during current or future site use and this reduction could cause an increase in the concentrations of hazardous substances in the soil, soil cleanup levels shall also apply to these larger soil particles. Compliance with soil cleanup levels shall be based on dry weight concentrations. The department may approve the use of alternate procedures for stabilized soils.

(b) When soil levels have been established at a site, sampling of the soil shall be conducted to determine if compliance with the soil cleanup levels has been achieved. Sampling and analytical procedures shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. The sample design shall provide data that are representative of the area where exposure to hazardous substances may occur.

(c) The data analysis and evaluation procedures used to evaluate compliance with soil cleanup levels shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. These procedures shall meet the following general requirements:

(i) Methods of data analysis shall be consistent with the sampling design. Separate methods may be specified for surface soils and deeper soils;

(ii) When cleanup levels are based on requirements specified in applicable state and federal laws, the procedures for evaluating compliance that are specified in those requirements shall be used to evaluate compliance with cleanup levels unless those procedures conflict with the intent of this section;

(iii) Where procedures for evaluating compliance are not specified in an applicable state and federal law, statistical methods shall be appropriate for the distribution of sampling data for each hazardous substance. If the distributions for hazardous substances differ, more than one statistical method may be required; and

(iv) The data analysis plan shall specify which parameters are to be used to determine compliance with soil cleanup levels.

(A) For cleanup levels based on short-term or acute toxic effects on human health or the environment, an upper percentile soil concentration shall be used to evaluate compliance with cleanup levels.

(B) For cleanup levels based on chronic or carcinogenic threats, the true mean soil concentration shall be used to evaluate compliance with cleanup levels.

(d) When data analysis procedures for evaluating compliance are not specified in an applicable state or federal law the following procedures shall be used:

(i) A confidence interval approach that meets the following requirements:

(A) The upper one sided ninety-five percent confidence limit on the true mean soil concentration shall be less than the soil cleanup level. For lognormally distributed data, the upper one-sided ninety-five percent confidence limit shall be calculated using Land's method; and

(B) Data shall be assumed to be lognormally distributed unless this assumption is rejected by a statistical test. If a lognormal distribution is inappropriate, data shall be assumed to be normally distributed unless this assumption is rejected by a statistical test. The W test, D'Agostino's test, or, censored probability plots, as appropriate for the data, shall be the statistical methods used to determine whether the data are lognormally or normally distributed;

(ii) For an evaluation conducted under (c)(iv)(A) of this subsection, a parametric test for percentiles based on tolerance intervals to test the proportion of soil samples having concentrations less than the soil cleanup level. When using this method, the true proportion of samples that do not exceed the soil cleanup level shall not be less than ninety percent. Statistical tests shall be performed with a Type I error level of 0.05;

(iii) Direct comparison of soil sample concentrations with cleanup levels may be used to evaluate compliance with cleanup levels where selective sampling of soil can be reliably expected to find suspected soil contamination. There must be documented, reliable information that the soil samples have been taken from the appropriate locations. Persons using this method must demonstrate that the basis used for selecting the soil sample locations provides a high probability that any existing areas of soil contamination have been found; or

(iv) Other statistical methods approved by the department.

(e) All data analysis methods used, including those specified in state and federal law, must meet the following requirements:

(i) No single sample concentration shall be greater than two times the soil cleanup level. Higher exceedances to control false positive error rates at five percent may be approved by the department when the cleanup level is based on background concentrations; and

(ii) Less than ten percent of the sample concentrations shall exceed the soil cleanup level. Higher exceedances to control false positive error rates at five percent may be approved by the department when the cleanup level is based on background concentrations.

(f) When using statistical methods to demonstrate compliance with soil cleanup levels, the following procedures shall be used for measurements below the practical quantitation limit:

(i) Measurements below the method detection limit shall be assigned a value equal to one-half the method detection limit when not more than fifteen percent of the measurements are below the practical quantitation limit.

(ii) Measurements above the method detection limit but below the practical quantitation limit shall be assigned a value equal to the method detection limit when not more than fifteen percent of the measurements are below the practical quantitation limit.

(iii) When between fifteen and fifty percent of the measurements are below the practical quantitation limit and the data are assumed to be lognormally or normally distributed, Cohen's method shall be used to calculate a corrected mean and standard deviation for use in calculating an upper confidence limit on the true mean soil concentration.

(iv) If more than fifty percent of the measurements are below the practical quantitation limit, the largest value in the data set shall be used in place of an upper confidence limit on the true mean soil concentration.

(v) The department may approve alternate statistical procedures for handling nondetected values or values below the practical quantitation limit.

(vi) If a hazardous substance or petroleum fraction has never been detected in any sample at a site and these substances are not suspected of being present at the site based on site history and other knowledge, that hazardous substance or petroleum fraction may be excluded from the statistical analysis.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-740, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-740, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-740, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-745 Soil cleanup standards for industrial properties. (1) Applicability.

(a) Criteria. This section shall be used to establish soil cleanup levels where the department has determined that industrial land use represents the reasonable maximum exposure. Soil cleanup levels for this presumed exposure scenario shall be established in accordance with this section. To qualify as an industrial land use and to use an industrial soil cleanup level a site must meet the following criteria:

(i) The area of the site where industrial property soil cleanup levels are proposed must meet the definition of an industrial property under WAC 173-340-200;

Industrial soil cleanup levels are based on an adult worker exposure scenario. It is essential to evaluate land uses and zoning for compliance with this definition in the context of this exposure scenario. Local governments use a variety of zoning categories for industrial land uses so a property does not necessarily have to be in a zone called "industrial" to meet the definition of "industrial property." Also, there are land uses allowed in industrial zones that are actually commercial or residential, rather than industrial, land uses. Thus, an evaluation to determine compliance with this definition should include a review of the actual text in the comprehensive plan and zoning ordinance pertaining to the site and a visit to the site to observe land uses in the zone. When evaluating land uses to determine if a property use not specifically listed in the definition is a "traditional industrial use" or to determine if the property is "zoned for industrial use," the following characteristics shall be considered:

(A) People do not normally live on industrial property. The primary potential exposure is to adult employees of businesses located on the industrial property;

(B) Access to industrial property by the general public is generally not allowed. If access is allowed, it is highly limited and controlled due to safety or security considerations;

(C) Food is not normally grown/raised on industrial property. (However, food processing operations are commonly considered industrial facilities);

(D) Operations at industrial properties are often (but not always) characterized by use and storage of chemicals, noise, odors and truck traffic;

(E) The surface of the land at industrial properties is often (but not always) mostly covered by buildings or other structures, paved parking lots, paved access roads and material storage areas—minimizing potential exposure to the soil; and

(F) Industrial properties may have support facilities consisting of offices, restaurants, and other facilities that are commercial in nature but are primarily devoted to administrative functions necessary for the industrial use and/or are primarily intended to serve the industrial facility employees and not the general public.

(ii) The cleanup action provides for appropriate institutional controls implemented in accordance with WAC 173-340-440 to limit potential exposure to residual hazardous substances. This shall include, at a minimum, placement of a covenant on the property restricting use of the area of the site where industrial soil cleanup levels are proposed to industrial property uses; and

(iii) Hazardous substances remaining at the property after remedial action would not pose a threat to human health or the environment at the site or in adjacent nonindustrial areas. In evaluating compliance with this criterion, at a minimum the following factors shall be considered:

(A) The potential for access to the industrial property by the general public, especially children. The proximity of the industrial property to residential areas, schools or childcare facilities shall be considered when evaluating access. In addition, the presence of natural features, manmade structures, arterial streets or intervening land uses that would limit or encourage access to the industrial property shall be considered. Fencing shall not be considered sufficient to limit access to an industrial property since this is insufficient to assure long term protection;

(B) The degree of reduction of potential exposure to residual hazardous substances by the selected remedy. Where

the residual hazardous substances are to be capped to reduce exposure, consideration shall be given to the thickness of the cap and the likelihood of future site maintenance activities, utility and drainage work, or building construction reexposing residual hazardous substances;

(C) The potential for transport of residual hazardous substances to off-property areas, especially residential areas, schools and childcare facilities;

(D) The potential for significant adverse effects on wildlife caused by residual hazardous substances using the procedures in WAC 173-340-7490 through 173-340-7494; and

(E) The likelihood that these factors would not change for the foreseeable future.

(b) **Expectations.** In applying the criteria in (a) of this subsection, the department expects the following results:

(i) The department expects that properties zoned for heavy industrial or high intensity industrial use and located within a city or county that has completed a comprehensive plan and adopted implementing zoning regulations under the Growth Management Act (chapter 36.70A RCW) will meet the definition of industrial property. For cities and counties not planning under the Growth Management Act, the department expects that spot zoned industrial properties will not meet the definition of industrial property but that properties that are part of a larger area zoned for heavy industrial or high intensity industrial use will meet the definition of an industrial property;

(ii) For both GMA and non-GMA cities and counties, the department expects that light industrial and commercial zones and uses should meet the definition of industrial property where the land uses are comparable to those cited in the definition of industrial property or the land uses are an integral part of a qualifying industrial use (such as, ancillary or support facilities). This will require a site-by-site evaluation of the zoning text and land uses;

(iii) The department expects that for portions of industrial properties in close proximity to (generally, within a few hundred feet) residential areas, schools or childcare facilities, residential soil cleanup levels will be used unless:

(A) Access to the industrial property is very unlikely or, the hazardous substances that are not treated or removed are contained under a cap of clean soil (or other materials) of substantial thickness so that it is very unlikely the hazardous substances would be disturbed by future site maintenance and construction activities (depths of even shallow footings, utilities and drainage structures in industrial areas are typically three to six feet); and

(B) The hazardous substances are relatively immobile (or have other characteristics) or have been otherwise contained so that subsurface lateral migration or surficial transport via dust or runoff to these nearby areas or facilities is highly unlikely; and

(iv) Note that a change in the reasonable maximum exposure to industrial site use primarily affects the direct contact exposure pathway. Thus, for example, for sites where the soil cleanup level is based primarily on the potential for the hazardous substance to leach and cause ground water contamination, it is the department's expectation that an industrial land use will not affect the soil cleanup level. Similarly, where the soil cleanup level is based primarily on surface water protection or other pathways other than direct human contact, land use is not expected to affect the soil cleanup level.

(2) **General considerations.**

(a) In the event of a release of a hazardous substance at a site qualifying as industrial property, a cleanup action that complies with this chapter shall be conducted to address those soils with hazardous substance concentrations which exceed industrial soil cleanup levels at the relevant point of compliance.

(b) Soil cleanup levels for areas beyond the industrial property boundary that do not qualify for industrial soil cleanup levels under this section (including implementation of institutional controls and a covenant restricting use of the property to industrial property uses) shall be established in accordance with WAC 173-340-740.

(c) Industrial soil cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of ground water, surface water, sediment or air cleanup standards established under this chapter or under applicable state and federal laws. A property that qualifies for an industrial soil cleanup level under this section does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(d) The department may require more stringent soil cleanup standards than required by this section when, based on a site-specific evaluation, the department determines that this is necessary to protect human health and the environment, including consideration of the factors in WAC 173-340-740 (1)(c). Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(3) **Method A industrial soil cleanup levels.**

(a) **Applicability.** Method A industrial soil cleanup levels may be used only at any industrial property qualifying under WAC 173-340-704(1).

(b) **General requirements.** Method A industrial soil cleanup levels shall be at least as stringent as all of the following:

(i) Concentrations in Table 745-1 and compliance with the corresponding footnotes;

(ii) Concentrations established under applicable state and federal laws;

(iii) Concentrations that result in no significant adverse effects on the protection and propagation of terrestrial ecological receptors using the procedures specified in WAC 173-340-7490 through 173-340-7493, unless it is demonstrated under those sections that establishing a soil concentration is unnecessary; and

(iv) For a hazardous substance that is deemed an indicator hazardous substance under WAC 173-340-708(2) and for which there is no value in Table 745-1 or applicable state and federal laws, a concentration that does not exceed the natural background concentration or the practical quantification limit, subject to the limitations in this chapter.

(4) **Method B industrial soil cleanup levels.** This section does not provide procedures for establishing Method B industrial soil cleanup levels. Method C is the standard method for establishing soil cleanup levels at industrial sites

and its use is conditioned upon the continued use of the site for industrial purposes. The person conducting the cleanup action also has the option of establishing unrestricted land use soil cleanup levels under WAC 173-340-740 for qualifying industrial properties. This option may be desirable when the person wants to avoid restrictions on the future use of the property. When a site does not qualify for a Method A or Method C industrial soil cleanup level under this section, or the user chooses to establish unrestricted land use soil cleanup levels at a site, soil cleanup levels must be established using Methods A or B under WAC 173-340-740.

(5) **Method C industrial soil cleanup levels.**

(a) **Applicability.** Method C industrial soil cleanup levels consist of standard and modified cleanup levels as described in this subsection. Either standard or modified Method C soil cleanup levels may be used at any industrial property qualifying under subsection (1) of this section.

(b) **Standard Method C industrial soil cleanup levels.** Standard Method C industrial soil cleanup levels for industrial properties shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws;

(ii) **Environmental protection.** Concentrations that result in no significant adverse effects on the protection and propagation of wildlife established using the procedures specified in WAC 173-340-7490 through 173-340-7494, unless it is demonstrated under those sections that establishing a soil concentration is unnecessary.

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations that protect human health as determined by evaluating the following exposure pathways:

(A) **Ground water protection.** Concentrations that will not cause contamination of ground water to concentrations which exceed ground water cleanup levels established under WAC 173-340-720 as determined using the methods described in WAC 173-340-747.

(B) **Soil direct contact.** Concentrations that, due to direct contact with contaminated soil, are estimated to result in no acute or chronic noncarcinogenic toxic effects on human health using a hazardous quotient of one (1) and concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand (1×10^{-5}). Equations 745-1 and 745-2 and the associated default assumptions shall be used to conduct this calculation.

(I) **Noncarcinogens.** For noncarcinogenic toxic effects of hazardous substances due to soil ingestion, concentrations shall be determined using Equation 745-1. For petroleum mixtures and components of such mixtures, see (b)(iii)(B)(III) of this subsection.

[Equation 745-1]

$$\text{Soil Cleanup Level (mg/kg)} = \frac{\text{RfD} \times \text{ABW} \times \text{UCF} \times \text{HQ} \times \text{AT}}{\text{SIR} \times \text{AB1} \times \text{EF} \times \text{ED}}$$

Where:

RfD	=	Reference dose as specified in WAC 173-340-708(7) (mg/kg-day)
ABW	=	Average body weight over the exposure duration (70 kg)
UCF	=	Unit conversion factor (1,000,000 mg/kg)
SIR	=	Soil ingestion rate (50 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless)
EF	=	Exposure frequency (0.4) (unitless)
HQ	=	Hazard quotient (1) (unitless)
AT	=	Averaging time (20 years)
ED	=	Exposure duration (20 years)

(II) **Carcinogens.** For carcinogenic effects of hazardous substances due to soil ingestion, concentrations shall be determined using Equation 745-2. For petroleum mixtures and components of such mixtures, see (b)(iii)(B)(III) of this subsection.

[Equation 745-2]

$$\text{Soil Cleanup Level (mg/kg)} = \frac{\text{RISK} \times \text{ABW} \times \text{AT} \times \text{UCF}}{\text{CPF} \times \text{SIR} \times \text{AB1} \times \text{ED} \times \text{EF}}$$

Where:

RISK	=	Acceptable cancer risk level (1 in 100,000) (unitless)
ABW	=	Average body weight over the exposure duration (70 kg)
AT	=	Averaging time (75 years)
UCF	=	Unit conversion factor (1,000,000 mg/kg)
CPF	=	Carcinogenic Potency Factor as specified in WAC 173-340-708(8) (kg-day/mg)
SIR	=	Soil ingestion rate (50 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless)
ED	=	Exposure duration (20 years)
EF	=	Exposure frequency (0.4) (unitless)

(III) **Petroleum mixtures.** For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated taking into account the additive effects of the petroleum fractions and volatile organic compounds present in the petroleum mixture. Equation 745-3 shall be used for this calculation. This equation takes into account concurrent exposure due to ingestion and dermal contact with petroleum contaminated soils. Cleanup levels for other noncarcinogens and known or suspected carcinogens within the petroleum mixture shall be calculated using Equations 745-4 and 745-5. See Table 830-1 for the analyses required for various petroleum products to use this method.

[Equation 745-3]

$$C_{soil} = \frac{HI \times ABW \times AT}{EF \times ED \left[\left(\frac{SIR \times AB1}{10^6 mg/kg} \sum_{i=1}^{n} \frac{F(i)}{RfDo(i)} \right) + \left(\frac{SA \times AF}{10^6 mg/kg} \sum_{i=1}^{n} \frac{F(i) \times ABS(i)}{RfDd(i)} \right) \right]}$$

Where:

C_{soil}	=	TPH soil cleanup level (mg/kg)
HI	=	Hazard index (1) (unitless)
ABW	=	Average body weight over the exposure duration (70 kg)
AT	=	Averaging time (20 years)
EF	=	Exposure frequency (0.7) (unitless)
ED	=	Exposure duration (20 years)
SIR	=	Soil ingestion rate (50 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless)
F(i)	=	Fraction (by weight) of petroleum component (i) (unitless)
SA	=	Dermal surface area (2,500 cm^2)
AF	=	Adherence factor (0.2 mg/cm^2-day)

ABS = Dermal absorption fraction for petroleum component (i) (unitless). May use chemical-specific values or the following defaults:
- 0.0005 for volatile petroleum components with vapor press > = benzene
- 0.03 for volatile petroleum components with vapor press < benzene
- 0.1 for other petroleum components

RfDo(i) = Oral reference dose of petroleum component (i) as defined in WAC 173-340-708(7) (mg/kg-day)

RfDd(i) = Dermal reference dose for petroleum component (i) (mg/kg-day) derived by RfDo x GI

GI = Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults:
- 0.8 for volatile petroleum components
- 0.5 for other petroleum components

n = The number of petroleum components (petroleum fractions plus volatile organic compounds with an RfD) present in the petroleum mixture. (See Table 830-1.)

(C) **Soil vapors.** The soil to vapor pathway shall be evaluated for volatile organic compounds whenever any of the following conditions exist:

(I) For gasoline range organics, whenever the total petroleum hydrocarbon (TPH) concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(6) using the default assumptions;

(II) For diesel range organics, whenever the total petroleum hydrocarbon (TPH) concentration is greater than 10,000 mg/kg;

(III) For other volatile organic compounds, including petroleum components, whenever the concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(4).

See subsection (5)(c)(iv)(B) of this section for methods that may be used to evaluate the soil to vapor pathway.

(c) **Modified Method C soil cleanup levels.**

(i) **General.** Modified Method C soil cleanup levels are standard Method C soil cleanup levels modified with chemical-specific or site-specific data. When making these adjustments, the resultant cleanup levels shall meet applicable state and federal laws, meet health risk levels for standard Method C soil cleanup levels, and be demonstrated to be environmentally protective using the procedures specified in WAC 173-340-7490 through 173-340-7494. Changes to exposure assumptions must comply with WAC 173-340-708(10).

(ii) **Allowable modifications.** The following modifications may be made to the default assumptions in the standard Method C equations to derive modified Method C soil cleanup levels:

(A) For the protection of ground water see WAC 173-340-747;

(B) For soil ingestion, the gastrointestinal absorption fraction may be modified if the requirements of WAC 173-340-702 (14), (15), (16), and 173-340-708(10) are met;

(C) For dermal contact, the adherence factor, dermal absorption fraction and gastrointestinal absorption conversion factor may be modified if the requirements of WAC 173-340-702 (14), (15), (16), and 173-340-708(10) are met;

(D) Toxicity equivalent factors, as described in WAC 173-340-708(8), may be used for assessing the potential carcinogenic risk of mixtures of chlorinated dibenzo-p-dioxins, chlorinated dibenzofurans and polycyclic aromatic hydrocarbons;

(E) The reference dose and cancer potency factor may be modified if the requirements in WAC 173-340-708 (7) and (8) are met; and

(F) Modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16).

(iii) **Dermal contact.** For hazardous substances other than petroleum mixtures, dermal contact with the soil shall be evaluated whenever the proposed changes to Equations 745-1 and 745-2 would result in a significantly higher soil cleanup level than would be calculated without the proposed changes. When conducting this evaluation, the following equations and default assumptions shall be used:

(A) For noncarcinogens use Equation 745-4. This equation takes into account concurrent exposure due to ingestion and dermal contact with soil.

[Equation 745-4]

$$C_{soil} = \frac{HQ \times ABW \times AT}{EF \times ED \left[\left(\frac{1}{RfDo} \times \frac{SIR \times AB1}{10^6 mg/kg} \right) + \left(\frac{1}{RfDd} \times \frac{SA \times AF \times ABS}{10^6 mg/kg} \right) \right]}$$

Where:

C_{soil} = Soil cleanup level (mg/kg)

HQ = Hazard quotient (unitless)

ABW = Average body weight over the exposure duration (70 kg)

AT = Averaging time (20 years)

EF = Exposure frequency (0.7) (unitless)

ED = Exposure duration (20 years)

SIR = Soil ingestion rate (50 mg/day)

AB1 = Gastrointestinal absorption fraction (1.0) (unitless)

SA = Dermal surface area (2,500 mg/cm^2)

AF = Adherence factor (0.2 mg/cm^2-day)

ABS = Dermal absorption fraction (unitless). May use chemical-specific values or the following defaults:
- 0.01 for inorganic hazardous substances
- 0.0005 for volatile organic compounds with vapor press > = benzene
- 0.03 for volatile organic compounds with vapor press < benzene
- 0.1 for other organic hazardous substances

RfDo = Oral reference dose as defined in WAC 173-340-708(7) (mg/kg-day)

RfDd = Dermal reference dose (mg/kg-day) derived by RfDo x GI

GI = Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults:
- 0.2 for inorganic hazardous substances
- 0.8 for volatile organic compounds
- 0.5 for other organic hazardous substances

(B) For carcinogens use Equation 745-5. This equation takes into account concurrent exposure due to ingestion and dermal contact with soil.

[Equation 745-5]

$$C_{soil} = \frac{RISK \times ABW \times AT}{EF \times ED \left[\left(\frac{SIR \times AB1 \times CPFo}{10^6 mg/kg} \right) + \left(\frac{SA \times AF \times ABS \times CPFd}{10^6 mg/kg} \right) \right]}$$

Where:

C_{soil} = Soil cleanup level (mg/kg)
RISK = Acceptable cancer risk (1 in 100,000) (unitless)
ABW = Average body weight over the exposure duration (70 kg)
AT = Averaging time (75 years)
EF = Exposure frequency (0.7) (unitless)
ED = Exposure duration (20 years)
SIR = Soil ingestion rate (50 mg/day)
AB1 = Gastrointestinal absorption fraction (1.0) (unitless)
CPFo = Oral cancer potency factor as defined in WAC 173-340-708(8) (kg-day/mg)
CPFd = Dermal cancer potency factor (kg-day/mg) derived by CPFo/GI
GI = Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults:
- 0.2 for inorganic hazardous substances
- 0.8 for volatile organic compounds
- 0.5 for other organic hazardous substances

SA = Dermal surface area (2,500 cm^2)
AF = Adherence factor (0.2 mg/cm^2-day)
ABS = Dermal absorption fraction (unitless). May use chemical-specific values or the following defaults:
- 0.01 for inorganic hazardous substances
- 0.0005 for volatile organic compounds with vapor press >= benzene
- 0.03 for volatile organic compounds substances with vapor press < benzene
- 0.1 for other organic hazardous substances

(C) Modifications may be made to Equations 745-4 and 745-5 as provided for in subsection (5)(c)(ii) of this section.

(iv) **Soil vapors.**

(A) **Applicability.** The soil to vapor pathway shall be evaluated for volatile organic compounds whenever any of the following conditions exist:

(I) For other than petroleum hydrocarbon mixtures, the proposed changes to the standard Method C equations (Equations 745-1 and 745-2) or default values would result in a significantly higher soil cleanup level than would be calculated without the proposed changes;

(II) For petroleum hydrocarbon mixtures, the proposed changes to the standard Method C equations (Equations 745-3, 745-4 and 745-5) or default values would result in a significantly higher soil cleanup level than would be calculated without the proposed changes;

(III) For gasoline range organics, whenever the total petroleum hydrocarbon (TPH) concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(6) using the default assumptions;

(IV) For diesel range organics, whenever the total petroleum hydrocarbon (TPH) concentration is greater than 10,000 mg/kg;

(V) For other volatile organic compounds, including petroleum components, whenever the concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(4).

(B) **Evaluation methods.** Soil cleanup levels that are protective of the indoor and ambient air shall be determined on a site-specific basis. Soil cleanup levels may be evaluated as being protective of air pathways using any of the following methods:

(I) Measurements of the soil vapor concentrations, using methods approved by the department, demonstrating vapors in the soil would not exceed air cleanup levels established under WAC 173-340-750.

(II) Measurements of ambient air concentrations and/or indoor air vapor concentrations throughout buildings, using methods approved by the department, demonstrating air does not exceed cleanup levels established under WAC 173-340-750. Such measurements must be representative of current and future site conditions when vapors are likely to enter and accumulate in structures. Measurement of ambient air may be excluded if it can be shown that indoor air is the most protective point of exposure.

(III) Use of modeling methods approved by the department to demonstrate the air cleanup standards established under WAC 173-340-750 will not be exceeded. When this method is used, the department may require soil vapor and/or air monitoring to be conducted to verify the calculations and compliance with air cleanup standards.

(IV) Other methods as approved by the department demonstrating the air cleanup standards established under WAC 173-340-750 will not be exceeded.

(d) **Using modified Method C to evaluate industrial soil remediation levels.** In addition to the adjustments allowed under subsection (5)(c) of this section, other adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(6) **Adjustments to industrial soil cleanup levels.**

(a) **Total site risk adjustments.** Soil cleanup levels for individual hazardous substances developed in accordance with subsection (5) of this section, including cleanup levels based on state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures specified in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(b) **Adjustments to applicable state and federal laws.** Where a cleanup level developed under subsection (3) or (5) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level shall be adjusted downward so that total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) **Natural background and analytical considerations.** Cleanup levels determined under subsection (3) or (5) of this section, including cleanup levels adjusted under subsection (6)(a) and (b) of this section, shall not be set at levels below the practical quantitation limit or natural background concentration, whichever is higher. See WAC 173-

340-707 and 173-340-709 for additional requirements pertaining to practical quantitation limits and natural background.

(7) **Point of compliance.** The point of compliance for industrial property soil cleanup levels shall be established in accordance with WAC 173-340-740(6).

(8) **Compliance monitoring.** Compliance monitoring and data analysis and evaluation for industrial property soil cleanup levels shall be performed in accordance with WAC 173-340-410 and 173-340-740(7).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-745, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-745, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-745, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-747 Deriving soil concentrations for ground water protection. (1) **Purpose.** The purpose of this section is to establish soil concentrations that will not cause contamination of ground water at levels that exceed the ground water cleanup levels established under WAC 173-340-720. Soil concentrations established under this section are used to establish either Method B soil cleanup levels (see WAC 173-340-740 (3)(b)(iii)(A) or Method C soil cleanup levels (see WAC 173-340-745 (5)(b)(iii)(A).

For the purposes of this section, "soil concentration" means the concentration in the soil that will not cause an exceedance of the ground water cleanup level established under WAC 173-340-720.

(2) **General requirements.** The soil concentration established under this section for each hazardous substance shall meet the following two criteria:

(a) The soil concentration shall not cause an exceedance of the ground water cleanup level established under WAC 173-340-720. To determine if this criterion is met, one of the methodologies specified in subsections (4) through (9) of this section shall be used; and

(b) To ensure that the criterion in (a) of this subsection is met, the soil concentration shall not result in the accumulation of nonaqueous phase liquid on or in ground water. To determine if this criterion is met, one of the methodologies specified in subsection (10) of this section shall be used.

(3) **Overview of methods.** This subsection provides an overview of the methods specified in subsections (4) through (10) of this section for deriving soil concentrations that meet the criteria specified in subsection (2) of this section. Certain methods are tailored for particular types of hazardous substances or sites. Certain methods are more complex than others and certain methods require the use of site-specific data. The specific requirements for deriving a soil concentration under a particular method may also depend on the hazardous substance.

(a) **Fixed parameter three-phase partitioning model.** The three-phase partitioning model with fixed input parameters may be used to establish a soil concentration for any hazardous substance. Site-specific data are not required for use of this model. See subsection (4) of this section.

(b) **Variable parameter three-phase partitioning model.** The three-phase partitioning model with variable input parameters may be used to establish a soil concentration for any hazardous substance. Site-specific data are required for use of this model. See subsection (5) of this section.

(c) **Four-phase partitioning model.** The four-phase partitioning model may be used to derive soil concentrations for any site where hazardous substances are present in the soil as a nonaqueous phase liquid (NAPL). The department expects that this model will be used at sites contaminated with petroleum hydrocarbons. Site-specific data are required for use of this model. See subsection (6) of this section.

(d) **Leaching tests.** Leaching tests may be used to establish soil concentrations for certain metals. Leaching tests may also be used to establish soil concentrations for other hazardous substances, including petroleum hydrocarbons, provided sufficient information is available to demonstrate that the leaching test can accurately predict ground water impacts. Testing of soil samples from the site is required for use of this method. See subsection (7) of this section.

(e) **Alternative fate and transport models.** Fate and transport models other than those specified in subsections (4) through (6) of this section may be used to establish a soil concentration for any hazardous substance. Site-specific data are required for use of such models. See subsection (8) of this section.

(f) **Empirical demonstration.** An empirical demonstration may be used to show that measured soil concentrations will not cause an exceedance of the applicable ground water cleanup levels established under WAC 173-340-720. This empirical demonstration may be used for any hazardous substance. Site-specific data (e.g., ground water samples and soil samples) are required under this method. If the required demonstrations cannot be made, then a protective soil concentration shall be established under one of the methods specified in subsections (4) through (8) of this section. See subsection (9) of this section.

(g) **Residual saturation.** To ensure that the soil concentration established under one of the methods specified in subsections (4) through (9) of this section will not cause an exceedance of the ground water cleanup level established under WAC 173-340-720, the soil concentration must not result in the accumulation of nonaqueous phase liquid (NAPL) on or in ground water. The methodologies and procedures specified in subsection (10) of this section shall be used to determine if this criterion is met.

(4) **Fixed parameter three-phase partitioning model.**

(a) **Overview.** This subsection specifies the procedures and requirements for establishing soil concentrations through the use of the fixed parameter three-phase partitioning model. The model may be used to establish soil concentrations for any hazardous substance. The model may be used to calculate both unsaturated and saturated zone soil concentrations.

This method provides default or fixed input parameters for the three-phase partitioning model that are intended to be protective under most circumstances and conditions; site-specific measurements are not required. In some cases it may be appropriate to use site-specific measurements for the

input parameters. Subsection (5) of this section specifies the procedures and requirements to establish site-specific input parameters for use in the three-phase partitioning model.

(b) **Description of the model.** The three-phase partitioning model is described by the following equation:

[Equation 747-1]

$$C_s = C_w(UCF)DF\left[K_d + \frac{(\theta_w + \theta_a H_{cc})}{\rho_b}\right]$$

Where:

C_s = Soil concentration (mg/kg)
C_w = Ground water cleanup level established under WAC 173-340-720 (ug/l)
UCF = Unit conversion factor (1mg/1,000 ug)
DF = Dilution factor (dimensionless: 20 for unsaturated zone soil; see (e) of this subsection for saturated zone soil)
K_d = Distribution coefficient (L/kg; see (c) of this subsection)
θ_w = Water-filled soil porosity (ml water/ml soil: 0.3 for unsaturated zone soil; see (e) of this subsection for saturated zone soil)
θ_a = Air-filled soil porosity (ml air/ml soil: 0.13 for unsaturated zone soil; see (e) of this subsection for saturated zone soil)
H_{cc} = Henry's law constant (dimensionless; see (d) of this subsection)
ρ_b = Dry soil bulk density (1.5 kg/L)

(c) **Distribution coefficient (K_d).** The default K_d values for organics and metals used in Equation 747-1 are as follows:

(i) **Organics.** For organic hazardous substances, the K_d value shall be derived using Equation 747-2. The K_{oc} (soil organic carbon-water partition coefficient) parameter specified in Equation 747-2 shall be derived as follows:

(A) **Nonionic organics.** For individual nonionic hydrophobic organic hazardous substances (e.g., benzene and naphthalene), the K_{oc} values in Table 747-1 shall be used. For hazardous substances not listed in Table 747-1, K_d values may be developed as provided in subsection (5) of this section (variable three-phase partitioning model).

(B) **Ionizing organics.** For ionizing organic hazardous substances (e.g., pentachlorophenol and benzoic acid), the K_{oc} values in Table 747-2 shall be used. Table 747-2 provides K_{oc} values for three different pHs. To select the appropriate K_{oc} value, the soil pH must be measured. The K_{oc} value for the corresponding soil pH shall be used. If the soil pH falls between the pH values provided, an appropriate K_{oc} value shall be selected by interpolation between the listed K_{oc} values.

[Equation 747-2]

$$K_d = K_{oc} \times f_{oc}$$

Where:

K_d = Distribution coefficient (L/kg)
K_{oc} = Soil organic carbon-water partitioning coefficient (ml/g). See (c)(i) of this subsection.
f_{oc} = Soil fraction of organic carbon (0.1% or 0.001 g/g)

(ii) **Metals.** For metals, the K_d values in Table 747-3 shall be used. For metals not listed in Table 747-3, K_d values may be developed as provided in subsection (5) of this section (variable three-phase partitioning model).

(d) **Henry's law constant.** For petroleum fractions, the values for Henry's law constant in Table 747-4 shall be used in Equation 747-1. For individual organic hazardous substances, the value shall be based on values in the scientific literature. For all metals present as inorganic compounds except mercury, zero shall be used. For mercury, either 0.47 or a value derived from the scientific literature shall be used. Derivation of Henry's law constant from the scientific literature shall comply with WAC 173-340-702 (14), (15) and (16).

(e) **Saturated zone soil concentrations.** Equation 747-1 may also be used to derive concentrations for soil that is located at or below the ground water table (the saturated zone). The following input parameters shall be changed if Equation 747-1 is used to derive saturated zone soil concentrations:

(i) The dilution factor shall be changed from 20 to 1;

(ii) The water-filled soil porosity value shall be changed from 0.3 ml water/ml soil to 0.43 ml water/ml soil; and

(iii) The air-filled soil porosity value shall be changed from 0.13 ml air/ml soil to zero.

(5) **Variable parameter three-phase partitioning model.**

(a) **Overview.** This section specifies the procedures and requirements to derive site-specific input parameters for use in the three-phase partitioning model. This method may be used to establish soil concentrations for any hazardous substance. This method may be used to calculate both unsaturated and saturated zone soil concentrations.

This method allows for the substitution of site-specific values for the default values in Equation 747-1 for one or more of the following five input parameters: Distribution coefficient, soil bulk density, soil volumetric water content, soil air content, and dilution factor. The methods that may be used and the requirements that shall be met to derive site-specific values for each of the five input parameters are specified in (b) through (f) of this subsection.

(b) **Methods for deriving a distribution coefficient (K_d).** To derive a site-specific distribution coefficient, one of the following methods shall be used:

(i) **Deriving K_d from soil fraction of organic carbon (foc) measurements.** Site-specific measurements of soil organic carbon may be used to derive distribution coefficients for nonionic hydrophobic organics using Equation 747-2. Soil organic carbon measurements shall be based on uncontaminated soil below the root zone (i.e., soil greater than one meter in depth) that is representative of site conditions or in areas through which contaminants are likely to migrate.

The laboratory protocols for measuring soil organic carbon in the Puget Sound Estuary Program (March, 1986) may be used. Other methods may also be used if approved by the department. All laboratory measurements of soil organic carbon shall be based on methods that do not include inorganic carbon in the measurements.

(ii) **Deriving K_d from site data.** Site-specific measurements of the hazardous substance concentrations in the soil and the soil pore water or ground water may be used, subject

to department approval, to derive a distribution coefficient. Distribution coefficients that have been derived from site data shall be based on measurements of soil and ground water hazardous substance concentrations from the same depth and location. Soil and ground water samples that have hazardous substances present as a nonaqueous phase liquid (NAPL) shall not be used to derive a distribution coefficient and measures shall be taken to minimize biodegradation and volatilization during sampling, transport and analysis of these samples.

(iii) **Deriving K_d from batch tests.** A site-specific distribution coefficient may be derived by using batch equilibrium tests, subject to department approval, to measure hazardous substance adsorption and desorption. The results from the batch test may be used to derive K_d from the sorption/desorption relationship between hazardous substance concentrations in the soil and water. Samples that have hazardous substances present as a nonaqueous phase liquid (NAPL) shall not be used to derive a distribution coefficient and measures shall be taken to minimize biodegradation and volatilization during testing.

(iv) **Deriving K_d from the scientific literature.** The scientific literature may be used to derive a site-specific distribution coefficient (K_d) for any hazardous substance, provided the requirements in WAC 173-340-702 (14), (15) and (16) are met.

(c) **Deriving soil bulk density.** ASTM Method 2049 or other methods approved by the department may be used to derive soil bulk density values.

(d) **Deriving soil volumetric water content using laboratory methods.** ASTM Method 2216 or other methods approved by the department may be used to derive soil volumetric water content values.

(e) **Estimating soil air content.** An estimate of soil air content may be determined by calculating soil porosity and subtracting the volumetric water content.

(f) **Deriving a dilution factor from site-specific estimates of infiltration and ground water flow volume.** Site-specific estimates of infiltration and ground water flow volume may be used in the following equation to derive a site-specific dilution factor:

[Equation 747-3]

$$DF = (Q_p + Q_a)/Q_p$$

Where:

- DF = Dilution factor (dimensionless)
- Q_p = Volume of water infiltrating (m^3/yr)
- Q_a = Ground water flow (m^3/yr)

(i) **Calculating ground water flow volume.** The following equation shall be used under this method to calculate the volume of ground water flow (Q_a):

[Equation 747-4]

$$Q_a = K \times A \times I$$

Where:

- Q_a = Ground water flow volume (m^3/year)
- K = Hydraulic conductivity (m/year). Site-specific measurements shall be used to derive this parameter.
- A = Aquifer mixing zone (m^2). The aquifer mixing zone thickness shall not exceed 5 meters in depth and be equal to a unit width of 1 meter, unless it can be demonstrated empirically that the mixing zone thickness exceeds 5 meters.
- I = Gradient (m/m). Site-specific measurements shall be used to derive this parameter.

(A) Equation 747-4 assumes the ground water concentrations of hazardous substances of concern upgradient of the site are not detectable. If this assumption is not true, the dilution factor may need to be adjusted downward in proportion to the upgradient concentration.

(B) Direct measurement of the flow velocity of ground water using methods approved by the department may be used as a substitute for measuring the ground water hydraulic conductivity and gradient.

(ii) **Calculating or estimating infiltration.** The following equation shall be used under this method to calculate the volume of water infiltrating (Q_p):

[Equation 747-5]

$$Q_p = L \times W \times Inf$$

Where:

- Q_p = Volume of water infiltrating (m^3/year)
- L = Estimated length of contaminant source area parallel to ground water flow (m)
- W = Unit width of contaminant source area (1 meter)
- Inf = Infiltration (m/year)

(A) If a default annual infiltration value (Inf) is used, the value shall meet the following requirements. For sites west of the Cascade Mountains, the default annual infiltration value shall be 70 percent of the average annual precipitation amount. For sites east of the Cascade Mountains, the default annual infiltration value shall be 25 percent of the average annual precipitation amount.

(B) If a site-specific measurement or estimate of infiltration (Inf) is made, it shall be based on site conditions without surface caps (e.g., pavement) or other structures that would control or impede infiltration. The presence of a cover or cap may be considered when evaluating the protectiveness of a remedy under WAC 173-340-350 through 173-340-360. If a site-specific measurement or estimate of infiltration is made, then it must comply with WAC 173-340-702 (14), (15) and (16).

(6) **Four-phase partitioning model.**

(a) **Overview.** This subsection specifies the procedures and requirements for establishing soil concentrations through the use of the four-phase partitioning model. This model may be used to derive soil concentrations for any site where hazardous substances are present in the soil as a nonaqueous phase liquid (NAPL). The model is described in (c) of this subsection. Instructions on how to use the model to establish protective soil concentrations are provided in (d) of this subsection.

(b) **Restrictions on use of the model for alcohol enhanced fuels.** The four-phase partitioning model may be used on a case-by-case basis for soil containing fuels (e.g., gasoline) that have been enhanced with alcohol. If the model is used for alcohol enhanced fuels, then it shall be demonstrated that the effects of cosolvency have been adequately considered and, where necessary, taken into account when applying the model. Use of the model for alcohol enhanced fuels without considering the effects of cosolvency and increased ground water contamination is prohibited.

(c) **Description of the model.** The four-phase partitioning model is based on the following three equations:

(i) **Conservation of volume equation.**

[Equation 747-6]

$$n = \theta_w + \theta_a + \theta_{NAPL}$$

Where:

n = Total soil porosity (ml total pore space/ml total soil volume). Use a default value of 0.43 ml/ml or use a value determined from site-specific measurements.

θ_w = Volumetric water content (ml water/ml soil). For unsaturated soil use a default value of 0.3 or a value determined from site-specific measurements. For saturated soil this value is unknown and must be solved for. Volumetric water content equals the total soil porosity minus volume occupied by the NAPL.

θ_a = Volumetric air content (ml air volume/ml total soil volume). For unsaturated soil this value is unknown and must be solved for. Volumetric air content equals the total soil porosity minus the volume occupied by the water and NAPL. For saturated soil this value is zero.

θ_{NAPL} = Volumetric NAPL content (ml NAPL volume/ml total soil volume). For both unsaturated and saturated soil this value is unknown and must be solved for.

(ii) **Four-phase partitioning equation.**

[Equation 747-7]

$$\frac{M^i_T}{m_{soil}} = \frac{x_i S_i}{\rho_b}\left[\theta_w + K^i_{oc} f_{oc} \rho_b + H^i_{cc}\theta_a + \frac{GFW_i}{S_i}\rho_{NAPL}\theta_{NAPL}\right]$$

Where:

M^i_T = Total mass of each component in the system (mg). This value is derived from site-specific measurements.

m_{soil} = Total soil mass (kg).

x_i = Mole fraction (at equilibrium) of each component (dimensionless). This value is unknown and must be solved for.

S_i = Solubility of each component (mg/l). See Table 747-4 for petroleum hydrocarbons; see the scientific literature for other hazardous substances.

P_b = Dry soil bulk density (1.5 kg/l).

K^i_{oc} = Soil organic carbon-water partitioning coefficient for each component (l/kg). See Table 747-4 for petroleum hydrocarbons; see subsection (4)(b) of this section for other hazardous substances.

f_{oc} = Mass fraction of soil natural organic carbon (0.001 g soil organic/g soil).

H^i_{cc} = Henry's law constant for each component (dimensionless). See Table 747-4 for petroleum hydrocarbons; see subsection (4)(c) of this section for other hazardous substances.

GFW_i = Gram formula weight, or molecular weight of each component (mg/mol). See Table 747-4 for petroleum hydrocarbons; see the scientific literature for other hazardous substances.

$\rho NAPL$ = Molar density of the mixture (mol/l). See Equation 747-8.

Component = For petroleum mixtures, this means the petroleum fractions, and organic hazardous substances with a reference dose; for other hazardous substances, this means each organic hazardous substance that is found in the NAPL.

(iii) **Molar density equation.**

[Equation 747-8]

$$\rho_{NAPL} = \frac{\left[\sum x_i GFW_i \Big/ \left(\sum x_i GFW_i/\rho_i\right)\right]}{\sum x_i GFW_i} = \frac{1}{\sum\left(x_i GFW_i/\rho_i\right)}$$

Where:

GFW_i = Gram formula weight, or molecular weight of each component (mg/mol). See Table 747-4 for petroleum hydrocarbons; see the scientific literature for other hazardous substances.

x_i = Mole fraction (at equilibrium) of each component (dimensionless). This value is unknown and must be solved for.

ρ_i = Density of each component (mg/l). See Table 747-4 for petroleum hydrocarbons; see the scientific literature for other hazardous substances.

Component = For petroleum mixtures, this means the petroleum fractions plus organic hazardous substances with a reference dose; for other hazardous substances, this means each organic hazardous substance that is found in the NAPL.

(d) **Instructions for using the model.** This subsection provides instructions for using the four-phase partitioning model to predict ground water concentrations and to establish protective soil concentrations. The model uses an iterative process to simultaneously solve multiple equations for several unknowns (see step 4 for the number of equations). To predict a ground water concentration, the mole fraction of each component (at equilibrium) must be known. The predicted ground water concentration is obtained by multiplying the water solubility of each component by the equilibrated mole fraction (Equation 747-7).

(i) **Step 1: Measure hazardous substance soil concentrations.** Collect and analyze soil samples and, if appropriate, samples of the product released, for each component. For petroleum hydrocarbons, see Table 830-1 for a description of what to analyze for.

(ii) **Step 2: Derive physical/chemical data.** For each of the components, determine the Henry's law constant, water solubility, soil organic carbon-water partitioning coefficient, density and molecular weight values. For petroleum hydrocarbons, see Table 747-4.

(iii) **Step 3: Derive soil parameters.** Derive a value for each of the following soil parameters as follows:

(A) **Soil organic carbon content.** Use the default value (0.001 g soil organic/g soil) or a site-specific value derived under subsection (5)(b)(i) of this section.

(B) **Soil volumetric water content.** Use the default value (0.43 minus the volume of NAPL and air) or a site-specific value derived under subsection (5)(d) of this section.

(C) **Soil volumetric air content.** Use the default value (0.13 ml/ml for unsaturated zone soil; zero for saturated zone soil) or a site-specific value derived under subsection (5)(e) of this section.

(D) **Soil bulk density and porosity.** Use the default values of 1.5 kg/l for soil bulk density and 0.43 for soil porosity or use site-specific values. If a site-specific value for bulk density is used, the method specified in subsection (5)(c) of this subsection shall be used. If a site-specific bulk density value is used, a site-specific porosity value shall also be used. The site-specific soil porosity value may be calculated using a default soil specific gravity of 2.65 g/ml or measuring the soil specific gravity using ASTM Method D 854.

(iv) **Step 4: Predict a soil pore water concentration.** Equation 747-7 shall be used to predict the soil pore water concentration for each component. To do this, multiple versions of Equation 747-7 shall be constructed, one for each of the components using the associated parameter inputs for K_{oc}, H_{cc}, GFW, and S. These equations shall then be combined with Equations 747-6 and 747-8 and the condition that $\Sigma x_i = 1$ and solved simultaneously for the unknowns in the equations (mole fraction of each component (X_i), volumetric NAPL content (θ_{NAPL}), and either the volumetric water content (θ_w) or the volumetric air content (θ_a).

(v) **Step 5: Derive a dilution factor.** Derive a dilution factor using one of the following two methods:

(A) Use the default value of 20 for unsaturated soils and 1 for saturated soils); or

(B) Derive a site-specific value using site-specific estimates of infiltration and ground water flow volume under subsection (5)(f) of this section.

(vi) **Step 6: Calculate a predicted ground water concentration.** Calculate a predicted ground water concentration for each component by dividing the predicted soil pore water concentration for each component by a dilution factor to account for the dilution that occurs once the component enters ground water.

(vii) **Step 7: Establishing protective soil concentrations.**

(A) **Petroleum mixtures.** For petroleum mixtures, compare the predicted ground water concentration for each component and for the total petroleum hydrocarbon mixture (sum of the petroleum components in the NAPL) with the applicable ground water cleanup level established under WAC 173-340-720.

(I) If the predicted ground water concentration for each of the components and for the total petroleum hydrocarbon mixture is less than or equal to the applicable ground water cleanup level, then the soil concentrations measured at the site are protective.

(II) If the condition in (d)(vii)(A)(I) of this subsection is not met, then the soil concentrations measured at the site are not protective. In this situation, the four-phase partitioning model can be used in an iterative process to calculate protective soil concentrations.

(B) **Other mixtures.** For mixtures that do not include petroleum hydrocarbons, compare the predicted ground water concentration for each hazardous substance in the mixture with the applicable ground water cleanup level established under WAC 173-340-720.

(I) If the predicted ground water concentration for each of the hazardous substances in the mixture is less than or equal to the applicable ground water cleanup level, then the soil concentrations measured at the site are protective.

(II) If the condition in (d)(vii)(B)(I) of this subsection is not met, then the soil concentrations measured at the site are not protective. In this situation, the four-phase partitioning model can be used in an iterative process to calculate protective soil concentrations.

(7) **Leaching tests.**

(a) **Overview.** This subsection specifies the procedures and requirements for deriving soil concentrations through the use of leaching tests. Leaching tests may be used to establish soil concentrations for the following specified metals: Arsenic, cadmium, total chromium, hexavalent chromium, copper, lead, mercury, nickel, selenium, and zinc (see (b) and (c) of this subsection). Leaching tests may also be used to establish soil concentrations for other hazardous substances, including petroleum hydrocarbons, provided sufficient information is available to correlate leaching test results with ground water impacts (see (d) of this subsection). Testing of soil samples from the site is required for use of this method.

(b) **Leaching tests for specified metals.** If leaching tests are used to establish soil concentrations for the specified metals, the following two leaching tests may be used:

(i) EPA Method 1312, Synthetic Precipitation Leaching Procedure (SPLP). Fluid #3 (pH = 5.0), representing acid rain in the western United States, shall be used when conducting this test. This test may underestimate ground water impacts when acidic conditions exist due to significant biological degradation or for other reasons. Underestimation of ground water impacts may occur, for example, when soils contaminated with metals are located in wood waste, in municipal solid waste landfills, in high sulfur content mining wastes, or in other situations with a pH <6. Consequently, this test shall not be used in these situations and the TCLP test should be used instead.

(ii) **EPA Method 1311, Toxicity Characteristic Leaching Procedure (TCLP).** Fluid #1 (pH = 4.93), representing organic acids generated by biological degradation processes, shall be used when conducting this test. This test is intended to represent situations where acidic conditions are present due to biological degradation such as in municipal solid waste landfills. Thus, it may underestimate ground water impacts where this is not the case and the metals of interest are more soluble under alkaline conditions. An example of this would be arsenic occurring in alkaline (pH >8) waste or soils. Consequently, this test shall not be used in these situations and the SPLP test should be used instead.

(c) **Criteria for specified metals.** When using either EPA Method 1312 or 1311, the analytical methods used for analysis of the leaching test effluent shall be sufficiently sensitive to quantify hazardous substances at concentrations at the ground water cleanup level established under WAC

173-340-720. For a soil metals concentration derived under (b) of this subsection to be considered protective of ground water, the leaching test effluent concentration shall meet the following criteria:

(i) For cadmium, lead and zinc, the leaching test effluent concentration shall be less than or equal to ten (10) times the applicable ground water cleanup level established under WAC 173-340-720.

(ii) For arsenic, total chromium, hexavalent chromium, copper, mercury, nickel and selenium, the leaching test effluent concentration shall be less than or equal to the applicable ground water cleanup level established under WAC 173-340-720.

(d) **Leaching tests for other hazardous substances.** Leaching tests using the methods specified in this subsection may also be used for hazardous substances other than the metals specifically identified in this subsection, including petroleum hydrocarbons. Alternative leaching test methods may also be used for any hazardous substance, including the metals specifically identified in this subsection. Use of the leaching tests specified in (b) and (c) of this subsection for other hazardous substances or in a manner not specified in (b) and (c) of this subsection, or use of alternative leaching tests for any hazardous substance, is subject to department approval and the user must demonstrate with site-specific field or laboratory data or other empirical data that the leaching test can accurately predict ground water impacts. The department will use the criteria in WAC 173-340-702 (14), (15) and (16) to evaluate the appropriateness of these alternative methods under WAC 173-340-702 (14), (15) and (16).

(8) **Alternative fate and transport models.**

(a) **Overview.** This subsection specifies the procedures and requirements for establishing soil concentrations through the use of fate and transport models other than those specified in subsections (4) through (6) of this section. These alternative models may be used to establish a soil concentration for any hazardous substance. Site-specific data are required for use of these models.

(b) **Assumptions.** When using alternative models, chemical partitioning and advective flow may be coupled with other processes to predict contaminant fate and transport, provided the following conditions are met:

(i) **Sorption.** Sorption values shall be derived in accordance with either subsection (4)(c) of this section or the methods specified in subsection (5)(b) of this section.

(ii) **Vapor phase partitioning.** If Henry's law constant is used to establish vapor phase partitioning, then the constant shall be derived in accordance with subsection (4)(d) of this section.

(iii) **Natural biodegradation.** Rates of natural biodegradation shall be derived from site-specific measurements.

(iv) **Dispersion.** Estimates of dispersion shall be derived from either site-specific measurements or literature values.

(v) **Decaying source.** Fate and transport algorithms may be used that account for decay over time.

(vi) **Dilution.** Dilution shall be based on site-specific measurements or estimated using a model incorporating site-specific characteristics. If detectable concentrations of hazardous substances are present in upgradient ground water, then the dilution factor may need to be adjusted downward in proportion to the background (upgradient) concentration.

(vii) **Infiltration.** Infiltration shall be derived in accordance with subsection (5)(f)(ii)(A) or (B) of this section.

(c) **Evaluation criteria.** Proposed fate and transport models, input parameters, and assumptions shall comply with WAC 173-340-702 (14), (15) and (16).

(9) **Empirical demonstration.**

(a) **Overview.** This subsection specifies the procedures and requirements for demonstrating empirically that soil concentrations measured at the site will not cause an exceedance of the applicable ground water cleanup levels established under WAC 173-340-720. This empirical demonstration may be used for any hazardous substance. Site-specific data (e.g., ground water and soil samples) are required under this method. If the demonstrations required under (b) of this subsection cannot be made, then a protective soil concentration shall be established under one of the methods specified in subsections (4) through (8) of this section.

(b) **Requirements.** To demonstrate empirically that measured soil concentrations will not cause an exceedance of the applicable ground water cleanup levels established under WAC 173-340-720, the following shall be demonstrated:

(i) The measured ground water concentration is less than or equal to the applicable ground water cleanup level established under WAC 173-340-720; and

(ii) The measured soil concentration will not cause an exceedance of the applicable ground water cleanup level established under WAC 173-340-720 at any time in the future. Specifically, it must be demonstrated that a sufficient amount of time has elapsed for migration of hazardous substances from soil into ground water to occur and that the characteristics of the site (e.g., depth to ground water and infiltration) are representative of future site conditions. This demonstration may also include a measurement or calculation of the attenuating capacity of soil between the source of the hazardous substance and the ground water table using site-specific data.

(c) **Evaluation criteria.** Empirical demonstrations shall be based on methods approved by the department. Those methods shall comply with WAC 173-340-702 (14), (15) and (16).

(10) **Residual saturation.**

(a) **Overview.** To ensure the soil concentrations established under one of the methods specified in subsections (4) through (9) of this section will not cause an exceedance of the ground water cleanup level established under WAC 173-340-720, the soil concentrations must not result in the accumulation of nonaqueous phase liquid on or in ground water (see subsection (2)(b) of this section). To determine if this criterion is met, either an empirical demonstration must be made (see (c) of this subsection) or residual saturation screening levels must be established and compared with the soil concentrations established under one of the methods specified in subsections (4) through (9) of this section (see (d) and (e) of this subsection). This subsection applies to any site where hazardous substances are present as a nonaqueous phase liquid (NAPL), including sites contaminated with petroleum hydrocarbons.

(b) **Definition of residual saturation.** When a nonaqueous phase liquid (NAPL) is released to the soil, some of the NAPL will be held in the soil pores or void spaces by capillary force. For the purpose of this subsection, the concentration of hazardous substances in the soil at equilibrium conditions is called residual saturation. At concentrations above residual saturation, the NAPL will continue to migrate due to gravimetric and capillary forces and may eventually reach the ground water, provided a sufficient volume of NAPL is released.

(c) **Empirical demonstration.** An empirical demonstration may be used to show that soil concentrations measured at the site will not result in the accumulation of nonaqueous phase liquid on or in ground water. An empirical demonstration may be used for any hazardous substance. Site-specific data (e.g., ground water and soil samples) are required under this method. If the demonstrations required under (c)(i) of this subsection cannot be made, then a protective soil concentration shall be established under (d) and (e) of this subsection.

(i) **Requirements.** To demonstrate empirically that measured soil concentrations will not result in the accumulation of nonaqueous phase liquid on or in ground water, the following shall be demonstrated:

(A) Nonaqueous phase liquid has not accumulated on or in ground water; and

(B) The measured soil concentration will not result in nonaqueous phase liquid accumulating on or in ground water at any time in the future. Specifically, it must be demonstrated that a sufficient amount of time has elapsed for migration of hazardous substances from soil into ground water to occur and that the characteristics of the site (e.g., depth to ground water and infiltration) are representative of future site conditions. This demonstration may also include a measurement or calculation of the attenuating capacity of soil between the source of the hazardous substance and the ground water table using site-specific data.

(iii) **Evaluation criteria.** Empirical demonstrations shall be based on methods approved by the department. Those methods shall comply with WAC 173-340-702 (14), (15) and (16).

(d) **Deriving residual saturation screening levels.** Unless an empirical demonstration is made under (c) of this subsection, residual saturation screening levels shall be derived and compared with the soil concentrations derived under the methods specified in subsections (4) through (9) of this subsection to ensure that those soil concentrations will not result in the accumulation of nonaqueous phase liquid on or in ground water. Residual saturation screening levels shall be derived using one of the following methods.

(i) **Default screening levels for petroleum hydrocarbons.** Residual saturation screening levels for petroleum hydrocarbons may be obtained from the values specified in Table 747-5.

(ii) **Site-specific screening levels.** Residual saturation screening levels for petroleum hydrocarbons and other hazardous substances may be derived from site-specific measurements. Site-specific measurements of residual saturation shall be based on methods approved by the department. Laboratory measurements or theoretical estimates (i.e., those that are not based on site-specific measurements) of residual saturation shall be supported and verified by site data. This may include an assessment of ground water monitoring data and soil concentration data with depth and an analysis of the soil's texture (grain size), porosity and volumetric water content.

(e) **Adjustment to the derived soil concentrations.** After residual saturation screening levels have been derived under (d) of this subsection, the screening levels shall be compared with the soil concentrations derived under one of the methods specified in subsections (4) through (9) of this subsection. If the residual saturation screening level is greater than or equal to the soil concentration derived using these methods, then no adjustment for residual saturation is necessary. If the residual saturation screening level is less than the soil concentration derived using these methods, then the soil concentration shall be adjusted downward to the residual saturation screening level.

(11) **Ground water monitoring requirements.** The department may, on a case-by-case basis, require ground water monitoring to confirm that hazardous substance soil concentrations derived under this section meet the criterion specified in subsection (2) of this section.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-747, filed 2/12/01, effective 8/15/01.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-7490 Terrestrial ecological evaluation procedures. (1) Purpose.

(a) WAC 173-340-7490 through 173-340-7494 define the goals and procedures the department will use for:

(i) Determining whether a release of hazardous substances to soil may pose a threat to the terrestrial environment;

(ii) Characterizing existing or potential threats to terrestrial plants or animals exposed to hazardous substances in soil; and

(iii) Establishing site-specific cleanup standards for the protection of terrestrial plants and animals.

(b) Information collected during a terrestrial ecological evaluation shall also be used in developing and evaluating cleanup action alternatives and in selecting a cleanup action under WAC 173-340-350 through 173-340-390. WAC 173-340-7490 through 173-340-7494 do not necessarily require a cleanup action for terrestrial ecological protection separate from a human health-based cleanup action. Where appropriate, a terrestrial ecological evaluation may be conducted so as to avoid duplicative studies of soil contamination that will be remediated to address other concerns, as provided in WAC 173-340-350 (7)(c)(iii)(F)(II).

(c) These procedures are not intended to be used to evaluate potential threats to ecological receptors in sediments, surface water, or wetlands. Procedures for sediment evaluations are described in WAC 173-340-760, and for surface water evaluations in WAC 173-340-730. Procedures for wetland evaluations shall be determined by the department on a case-by-case basis.

(2) **Requirements.** In the event of a release of a hazardous substance to the soil at a site, one of the following actions shall be taken:

(a) Document an exclusion from any further terrestrial ecological evaluation using the criteria in WAC 173-340-7491;

(b) Conduct a simplified terrestrial ecological evaluation as set forth in WAC 173-340-7492; or

(c) Conduct a site-specific terrestrial ecological evaluation as set forth in WAC 173-340-7493.

(3) **Goal.** The goal of the terrestrial ecological evaluation process is the protection of terrestrial ecological receptors from exposure to contaminated soil with the potential to cause significant adverse effects. For species protected under the Endangered Species Act or other applicable laws that extend protection to individuals of a species, a significant adverse effect means an impact that would significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering. For all other species, significant adverse effects are effects that impair reproduction, growth or survival.

(a) The simplified terrestrial ecological evaluation process has been developed to be protective of terrestrial ecological receptors at most qualifying sites, while the site-specific terrestrial ecological evaluation process is intended to be highly likely to be protective at any site.

(b) The following policy on terrestrial ecological receptors to be protected applies to all terrestrial ecological evaluations. For land uses other than industrial or commercial, protectiveness is evaluated relative to terrestrial plants, wildlife, and ecologically important functions of soil biota that affect plants or wildlife.

For industrial or commercial properties, current or future potential for exposure to soil contamination need only be evaluated for terrestrial wildlife protection. Plants and soil biota need not be considered unless:

(i) The species is protected under the federal Endangered Species Act; or

(ii) The soil contamination is located on an area of an industrial or commercial property where vegetation must be maintained to comply with local government land use regulations.

(c) For the purposes of this section, "industrial property" means properties meeting the definition in WAC 173-340-200. "Commercial property" means properties that are currently zoned for commercial or industrial property use and that are characterized by or are committed to traditional commercial uses such as offices, retail and wholesale sales, professional services, consumer services, and, warehousing.

(d) Any terrestrial remedy, including exclusions, based at least in part on future land use assumptions shall include a completion date for such future development acceptable to the department.

(4) **Point of compliance.**

(a) **Conditional point of compliance.** For sites with institutional controls to prevent excavation of deeper soil, a conditional point of compliance may be set at the biologically active soil zone. This zone is assumed to extend to a depth of six feet. The department may approve a site-specific depth based on a demonstration that an alternative depth is more appropriate for the site. In making this demonstration, the following shall be considered:

(i) Depth to which soil macro-invertebrates are likely to occur;

(ii) Depth to which soil turnover (bioturbation) is likely to occur due to the activities of soil invertebrates;

(iii) Depth to which animals likely to occur at the site are expected to burrow; and

(iv) Depth to which plant roots are likely to extend.

(b) **Standard point of compliance.** An institutional control is not required for soil contamination that is at least fifteen feet below the ground surface. This represents a reasonable estimate of the depth of soil that could be excavated and distributed at the soil surface as a result of site development activities, resulting in exposure by ecological receptors.

(5) **Additional measures.** The department may require additional measures to evaluate potential threats to terrestrial ecological receptors notwithstanding the provisions in this and the following sections, when based upon a site-specific review, the department determines that such measures are necessary to protect the environment.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7490, filed 2/12/01, effective 8/15/01.]

WAC 173-340-7491 Exclusions from a terrestrial ecological evaluation. (1) **Criteria for determining that no further evaluation is required.** No further evaluation is required if the department determines that a site meets any of the criteria in (a) through (d) of this subsection:

(a) All soil contaminated with hazardous substances is, or will be, located below the point of compliance established under WAC 173-340-7490(4). To qualify for this exclusion, an institutional control shall be required by the department under WAC 173-340-440. An institutional control is not required if the contamination is at least fifteen feet below the ground surface (WAC 173-340-7490 (4)(b)). An exclusion based on planned future land use shall include a completion date for such future development that is acceptable to the department.

(b) All soil contaminated with hazardous substances is, or will be, covered by buildings, paved roads, pavement, or other physical barriers that will prevent plants or wildlife from being exposed to the soil contamination. To qualify for this exclusion, an institutional control shall be required by the department under WAC 173-340-440. An exclusion based on planned future land use shall include a completion date for such future development that is acceptable to the department;

(c) Where the site conditions are related or connected to undeveloped land in the following manner:

(i) For sites contaminated with hazardous substances other than those specified in (c)(ii) of this subsection, there is less than 1.5 acres of contiguous undeveloped land on the site or within 500 feet of any area of the site; and

(ii) For sites contaminated with any of the following hazardous substances: Chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor or heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene, there is less than 1/4 acre of contiguous undeveloped land on or within 500 feet of any

area of the site affected by these hazardous substances. This list does not imply that sampling must be conducted for each of these chemicals at every site. Sampling should be conducted for those chemicals that might be present based on available information, such as current and past uses of chemicals at the site; and

(iii) For the purposes of (c)(i) and (ii) of this subsection, and Table 749-1, "undeveloped land" shall mean land that is not covered by buildings, roads, paved areas or other barriers that would prevent wildlife from feeding on plants, earthworms, insects or other food in or on the soil. "Contiguous" undeveloped land means an area of undeveloped land that is not divided into smaller areas by highways, extensive paving or similar structures that are likely to reduce the potential use of the overall area by wildlife. Roads, sidewalks and other structures that are unlikely to reduce potential use of the area by wildlife shall not be considered to divide a contiguous area into smaller areas.

(d) Concentrations of hazardous substances in soil do not exceed natural background levels, as determined under WAC 173-340-709.

(2) **Procedure for a site that does not qualify for an exclusion.**

(a) Sites that do not qualify for an exclusion under subsection (1) of this section shall conduct a site-specific terrestrial ecological evaluation if any of the following criteria apply:

(i) The site is located on, or directly adjacent to, an area where management or land use plans will maintain or restore native or seminative vegetation (e.g., green-belts, protected wetlands, forestlands, locally designated environmentally sensitive areas, open space areas managed for wildlife, and some parks or outdoor recreation areas. This does not include park areas used for intensive sport activities such as baseball or football).

(ii) The site is used by a threatened or endangered species; a wildlife species classified by the Washington state department of fish and wildlife as a "priority species" or "species of concern" under Title 77 RCW; or a plant species classified by the Washington state department of natural resources natural heritage program as "endangered," "threatened," or "sensitive" under Title 79 RCW. For plants, "used" means that a plant species grows at the site or has been found growing at the site. For animals, "used" means that individuals of a species have been observed to live, feed or breed at the site.

(iii) The site is located on a property that contains at least ten acres of native vegetation within 500 feet of the site, not including vegetation beyond the property boundaries.

(iv) The department determines that the site may present a risk to significant wildlife populations.

(b) If none of the criteria in (a) of this subsection apply to the site, either a simplified terrestrial ecological evaluation described under WAC 173-340-7492 or a site-specific terrestrial ecological evaluation described under WAC 173-340-7493 shall be conducted.

(c) For the purposes of this section, the following definitions shall apply.

(i) "Native vegetation" means any plant community native to the state of Washington. The following sources shall be used in making this determination: *Natural Vegetation of Oregon and Washington*, J.F. Franklin and C.T. Dyrness, Oregon State University Press, 1988, and L.C. Hitchcock, C.L. Hitchcock, J.W. Thompson and A. Cronquist, 1955-1969, *Vascular Plants of the Pacific Northwest* (5 volumes). Areas planted with native species for ornamental or landscaping purposes shall not be considered to be native vegetation.

(ii) "Seminative vegetation" means a plant community that includes at least some vascular plant species native to the state of Washington. The following shall not be considered seminative vegetation: Areas planted for ornamental or landscaping purposes, cultivated crops, and areas significantly disturbed and predominantly covered by noxious, introduced plant species or weeds (e.g., Scotch broom, Himalayan blackberry or knap-weed).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7491, filed 2/12/01, effective 8/15/01.]

WAC 173-340-7492 Simplified terrestrial ecological evaluation procedures. (1) **Purpose.**

(a) The simplified terrestrial ecological evaluation process is intended to identify those sites which do not have a substantial potential for posing a threat of significant adverse effects to terrestrial ecological receptors, and thus may be removed from further ecological consideration during the remedial investigation and cleanup process. For remaining sites, the process provides several options, including chemical concentrations that may be used as cleanup levels, and the choice of developing site-specific concentrations using bioassays or conducting a site-specific terrestrial ecological evaluation under WAC 173-340-7493.

(b) The process is structured with an intent to protect terrestrial wildlife at industrial or commercial sites, and terrestrial plants, soil biota and terrestrial wildlife at other sites, as provided under WAC 173-340-7490 (3)(b).

(c) The simplified terrestrial ecological evaluation procedures in subsection (2) of this section are organized to focus upon the extent of exposure, exposure pathways, and particular contaminants as key factors in evaluating ecological risk. The steps need not be followed in order, and any one step may be used to determine that no further evaluation is necessary to conclude that a site does not pose a substantial threat of significant adverse effects to terrestrial ecological receptors.

(d) If none of the simplified terrestrial ecological evaluation screening step conditions are met, the person conducting the evaluation may use the chemical concentration numbers listed in Table 749-2 as cleanup levels, or shall conduct a site-specific terrestrial ecological evaluation under WAC 173-340-7493.

(2) **Process for conducting a simplified terrestrial ecological evaluation.**

(a) Exposure analysis. The evaluation may be ended at a site where:

(i) The total area of soil contamination at the site is not more than 350 square feet; or

(ii) Land use at the site and surrounding area makes substantial wildlife exposure unlikely. Table 749-1 shall be used to make this evaluation.

(b) Pathways analysis. The evaluation may be ended if there are no potential exposure pathways from soil contamination to soil biota, plants or wildlife. For a commercial or industrial property, only potential exposure pathways to wildlife (e.g., small mammals, birds) need be considered. Only exposure pathways for priority chemicals of ecological concern listed in Table 749-2 at or above the concentrations provided must be considered. Incomplete pathways may be due to the presence of man-made physical barriers, either currently existing or to be placed (within a time frame acceptable to the department) as part of a remedy or land use. To ensure that such man-made barriers are maintained, a restrictive covenant shall be required by the department under WAC 173-340-440 under a consent decree, agreed order or enforcement order, or as a condition to a written opinion regarding the adequacy of an independent remedial action under WAC 173-340-515(3).

(c) Contaminants analysis. The evaluation may be ended if either of the following are true:

(i) No hazardous substance listed in Table 749-2 for which a value is listed is, or will be, present in the soil at a depth not exceeding the point of compliance established under WAC 173-340-7490(4) and at concentrations higher than the values provided in Table 749-2, using the statistical compliance methods described in WAC 173-340-740(7). An institutional control is required if the contamination is within fifteen feet of the ground surface (see WAC 173-340-7490 (4)(b)). If a hazardous substance listed in Table 749-2 does not have a value listed, then the requirements of (c)(ii) of this subsection must be met; or

(ii) No hazardous substance listed in Table 749-2 is, or will be, present in the soil within six feet of the ground surface at concentrations likely to be toxic, or with the potential to bioaccumulate, based on bioassays using methods approved by the department. An institutional control is required if the contaminant is within fifteen feet of the ground surface. If a hazardous substance listed in Table 749-2 does not have a value listed, then this subparagraph applies.

(3) **Institutional controls.** If any of the conditions listed above in subsection (2)(a)(ii) through (c) of this section are used to end the simplified terrestrial ecological evaluation, institutional controls may be needed to ensure that the condition will continue to be met in the future. Cleanup remedies that rely on chemical concentrations for industrial or commercial sites in Table 749-2 shall include appropriate institutional controls to prevent future exposure to plants or soil biota in the event of a change in land use.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7492, filed 2/12/01, effective 8/15/01.]

WAC 173-340-7493 Site-specific terrestrial ecological evaluation procedures. (1) **Purpose.**

(a) This section sets forth the procedures for conducting a site-specific terrestrial ecological evaluation if any of the conditions specified in WAC 173-340-7491 (2)(a) apply to the site, or if the person conducting the evaluation elects to conduct a site-specific terrestrial ecological evaluation under this section, whether or not a simplified terrestrial ecological evaluation has been conducted under WAC 173-340-7492.

(b) In addition to the purposes specified in WAC 173-340-7490 (1)(a), the site-specific terrestrial ecological evaluation is intended to facilitate selection of a cleanup action by developing information necessary to conduct evaluations of cleanup action alternatives in the feasibility study.

(c) There are two elements in planning a site-specific terrestrial ecological evaluation. Both elements shall be done in consultation with the department and must be approved by the department. The two elements are:

(i) Completing the problem formulation step as required under subsection (2) of this section; and

(ii) Selecting one or more methods under subsection (3) of this section for addressing issues identified in the problem formulation step.

(d) After reviewing information developed in the problem formulation step, the department may at its discretion determine that selection of one or more methods for proceeding with the evaluation is not necessary by making either of the following decisions:

(i) No further site-specific terrestrial ecological evaluation is necessary because the cleanup action plans developed for the protection of human health will eliminate exposure pathways of concern to all of the soil contamination.

(ii) A simplified terrestrial ecological evaluation may be conducted under WAC 173-340-7492 because this evaluation will adequately identify and address any existing or potential threats to ecological receptors.

(2) **Problem formulation step.**

(a) To define the focus of the site-specific terrestrial ecological evaluation, identify issues to be addressed in the evaluation, specifying:

(i) **The chemicals of ecological concern.** The person conducting the evaluation may eliminate hazardous substances from further consideration where the maximum or the upper ninety-five percent confidence limit soil concentration found at the site does not exceed ecological indicator concentrations described in Table 749-3. For industrial or commercial land uses, only the wildlife values need to be considered. Any chemical that exceeds the ecological indicator concentrations shall be included as a chemical of ecological concern in the evaluation unless it can be eliminated based on the factors listed in WAC 173-340-708 (2)(b). *(Caution on the use of ecological indicator concentrations: These numbers are not cleanup levels, and concentrations that exceed the number do not necessarily require remediation.)*

(ii) **Exposure pathways.** Identify any complete potential pathways for exposure of plants or animals to the chemicals of concern. If there are no complete exposure pathways then no further evaluation is necessary. Incomplete pathways may be due to the presence of man-made physical barriers, either currently existing or to be placed (within a time frame acceptable to the department) as part of a remedy or land use.

To ensure that such man-made barriers are maintained, a restrictive covenant shall be required by the department under WAC 173-340-440 under a consent decree, agreed order or enforcement order, or as a condition to a written opinion regarding the adequacy of an independent remedial action under WAC 173-340-515(3).

(iii) **Terrestrial ecological receptors of concern.** Identify current or potential future terrestrial species groups reasonably likely to live or feed at the site. Groupings should represent taxonomically related species with similar exposure characteristics. Examples of potential terrestrial species groups include: Vascular plants, ground-feeding birds, ground-feeding small mammal predators, and herbivorous small mammals.

(A) From these terrestrial species groups, select those groups to be included in the evaluation. If appropriate, individual terrestrial receptor species may also be included. In selecting species groups or individual species, the following shall be considered:

(I) Receptors that may be most at risk for significant adverse effects based on the toxicological characteristics of the chemicals of concern, the sensitivity of the receptor, and on the likely degree of exposure.

(II) Public comments.

(III) Species protected under applicable state or federal laws that may potentially be exposed to soil contaminants at the site.

(IV) Receptors to be considered under different land uses, described under WAC 173-340-7490 (3)(b).

(B) Surrogate species for which greater information is available, or that are more suitable for site-specific studies, may be used in the analysis when appropriate for addressing issues raised in the problem formulation step.

(iv) **Toxicological assessment.** Identify significant adverse effects in the receptors of concern that may result from exposure to the chemicals of concern, based on information from the toxicological literature.

(b) The following is an example of a site-specific issue developed in this step: Is dieldrin contamination a potential threat to reproduction in birds feeding on invertebrates and ingesting soil at the site? If so, what measures will eliminate any significant adverse effects?

(c) If there are identified information needs for remedy selection or remedial design, these should also be developed as issues for the problem formulation process.

(d) The use of assessment and measurement endpoints, as defined in USEPA *Ecological Risk Assessment Guidance for Superfund*, 1997, should be considered to clarify the logical structure of the site-specific terrestrial ecological evaluation under this chapter. Assessment endpoints shall be consistent with the policy objectives described in WAC 173-340-7490 (3)(b).

(3) **Selection of appropriate terrestrial ecological evaluation methods.** If it is determined during the problem formulation step that further evaluation is necessary, the soil concentrations listed in Table 749-3 may be used as the cleanup level at the discretion of the person conducting the evaluation. Alternatively, one or more of the following methods listed in (a) through (g) of this subsection that are relevant to the issues identified in the problem formulation step and that meet the requirements of WAC 173-340-7490 (1)(a) shall be conducted. The alternative methods available for conducting a site-specific terrestrial ecological evaluation include the following:

(a) **Literature survey.** An analysis based on a literature survey shall be conducted in accordance with subsection (4) of this section and may be used for purposes including the following:

(i) Developing a soil concentration for chemicals not listed in Table 749-3.

(ii) Identifying a soil concentration for the protection of plants or soil biota more relevant to site-specific conditions than the value listed in Table 749-3.

(iii) Obtaining a value for any of the wildlife exposure model variables listed in Table 749-5 to calculate a soil concentration for the protection of wildlife more relevant to site-specific conditions than the values listed in Table 749-3.

(b) **Soil bioassays.**

(i) Bioassays may use sensitive surrogate organisms not necessarily found at the site provided that the test adequately addresses the issues raised in the problem formulation step. For issues where existing or potential threats to plant life are a concern, the test described in *Early Seedling Growth Protocol for Soil Toxicity Screening*. Ecology Publication No. 96-324 may be used. For sites where risks to soil biota are a concern, the test described in *Earthworm Bioassay Protocol for Soil Toxicity Screening*. Ecology Publication No. 96-327 may be used. Other bioassay tests approved by the department may also be used.

(ii) Soil concentrations protective of soil biota or plants may also be established with soil bioassays that use species ecologically relevant to the site rather than standard test species. Species that do or could occur at the site are considered ecologically relevant.

(c) **Wildlife exposure model.** Equations and exposure parameters to be used in calculating soil concentrations protective of terrestrial wildlife are provided in Tables 749-4 and 749-5. Changes to this model may be approved by the department under the following conditions:

(i) Alternative values for parameters listed in Table 749-5 may be used if they can be demonstrated to be more relevant to site-specific conditions (for example, the value is based on a chemical form of a hazardous substance actually present at the site). An alternative value obtained from the literature shall be supported by a literature survey conducted in accordance with subsection (4) of this section.

(ii) Receptor species of concern or exposure pathways identified in the problem formulation step may be added to the model if appropriate on a site-specific basis.

(iii) A substitution for one or more of the receptor species listed in Table 749-4 may be made under subsection (7) of this section.

(d) **Biomarkers.** Biomarker methods may be used if the measurements have clear relevance to issues raised in the problem formulation and the approach has a high probability of detecting a significant adverse effect if it is occurring at the site. The person conducting the evaluation may elect to use criteria such as biomarker effects that serve as a sensitive surrogate for significant adverse effects.

(e) **Site-specific field studies.** Site-specific empirical studies that involve hypothesis testing should use a conventional "no difference" null hypothesis (e.g., H_0: Earthworm densities are the same in the contaminated area and the refer-

ence (control) area. H_A: Earthworm densities are higher in the reference area than in the contaminated area). In preparing a work plan, consideration shall be given to the adequacy of the proposed study to detect an ongoing adverse effect and this issue shall be addressed in reporting results from the study.

(f) **Weight of evidence.** A weight of evidence approach shall include a balance in the application of literature, field, and laboratory data, recognizing that each has particular strengths and weaknesses. Site-specific data shall be given greater weight than default values or assumptions where appropriate.

(g) **Other methods approved by the department.** This may include a qualitative evaluation if relevant toxicological data are not available and cannot be otherwise developed (e.g., through soil bioassay testing).

(4) **Literature surveys.**

(a) Toxicity reference values or soil concentrations established from the literature shall represent the lowest relevant LOAEL found in the literature. Bioaccumulation factor values shall represent a reasonable maximum value from relevant information found in the literature. In assessing relevance, the following principles shall be considered:

(i) Literature benchmark values should be obtained from studies that have test conditions as similar as possible to site conditions.

(ii) The literature benchmark values or toxicity reference values should correspond to the exposure route being assessed.

(iii) The toxicity reference value or bioaccumulation factor value shall be as appropriate as possible for the receptor being assessed. The toxicity reference value should be based on a significant endpoint, as described in subsection (2) of this section.

(iv) The literature benchmark value or toxicity reference value should preferably be based on chronic exposure.

(v) The literature benchmark value, toxicity reference value, or bioaccumulation factor should preferably correspond to the chemical form being assessed. Exceptions may apply for toxicity reference values where documented biological transformations occur following uptake of the chemical or where chemical transformations are known to occur in the environment under conditions appropriate to the site.

(b) A list of relevant journals and other literature consulted in the survey shall be provided to the department. A table summarizing information from all relevant studies shall be provided to the department in a report, and the studies used to select a proposed value shall be identified. Copies of literature cited in the table that are not in the possession of the department shall be provided with the report. The department may identify relevant articles, books or other documents that shall be included in the survey.

(5) **Uncertainty analysis.** If a site-specific terrestrial ecological evaluation includes an uncertainty analysis, the discussion of uncertainty shall identify and differentiate between uncertainties that can and cannot be quantified, and natural variability. The discussion shall describe the range of potential ecological risks from the hazardous substances present at the site, based on the toxicological characteristics of the hazardous substances present, and evaluate the uncertainty regarding these risks. Potential methods for reducing uncertainty shall also be discussed, such as additional studies or post-remedial monitoring. If multiple lines of independent evidence have been developed, a weight of evidence approach may be used in characterizing uncertainty.

(6) **New scientific information.** The department shall consider proposals for modifications to default values provided in this section based on new scientific information in accordance with WAC 173-340-702 (14), (15) and (16).

(7) **Substitute receptor species.** Substitutions of receptor species and the associated values in the wildlife exposure model described in Table 749-4 may be made subject to the following conditions:

(a) There is scientifically supportable evidence that a receptor identified in Table 749-4 is not characteristic or a reasonable surrogate for a receptor that is characteristic of the ecoregion where the site is located. "Ecoregions" are defined using EPA's *Ecoregions of the Pacific Northwest* Document No. 600/3-86/033 July 1986 by Omernik and Gallant.

(b) The proposed substitute receptor is characteristic of the ecoregion where the site is located and will serve as a surrogate for wildlife species that are, or may become exposed to soil contaminants at the site. The selected surrogate shall be a species that is expected to be vulnerable to the effects of soil contamination relative to the current default species because of high exposure or known sensitivity to hazardous substances found in soil at the site.

(c) Scientific studies concerning the proposed substitute receptor species are available in the literature to select reasonable maximum exposure estimates for variables listed in Table 749-4.

(d) In choosing among potential substitute receptor species that meet the criteria in (b) and (c) of this subsection, preference shall be given to the species most ecologically similar to the default receptor being replaced.

(e) Unless there is clear and convincing evidence that they are not characteristic of the ecoregion where the site is located, the following groups shall be included in the wildlife exposure model: A small mammalian predator on soil-associated invertebrates, a small avian predator on soil-associated invertebrates, and a small mammalian herbivore.

(f) To account for uncertainties in the level of protection provided to substitute receptor species and toxicologically sensitive species, the department may require any of the following:

(i) Use of toxicity reference values based on no observed adverse effects levels.

(ii) Use of uncertainty factors to account for extrapolations between species in toxicity or exposure parameter values; or

(iii) Use of a hazard index approach for multiple contaminants to account for additive toxic effects.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7493, filed 2/12/01, effective 8/15/01.]

WAC 173-340-7494 Priority contaminants of ecological concern. When the department determines that such measures are necessary to protect the environment, the department may revise the hazardous substances and corre-

sponding concentrations included in Table 749-2, subject to the following:

(1) The data indicate a significant tendency of the hazardous substance to persist, bioaccumulate, or be highly toxic to terrestrial ecological receptors;

(2) The concentrations for hazardous substances listed in Table 749-2 shall be based on protection of wildlife for industrial and commercial land uses, and upon protection of plants and animals for other land uses.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7494, filed 2/12/01, effective 8/15/01.]

WAC 173-340-750 Cleanup standards to protect air quality. (1) General considerations.

(a) This section applies whenever it is necessary to establish air cleanup standards to determine if air emissions at a site pose a threat to human health or the environment. It applies to ambient (outdoor) air and air within any building, utility vault, manhole or other structure large enough for a person to fit into. This section does not apply to concentrations of hazardous substances in the air originating from an industrial or commercial process or operation or to hazardous substances in the air originating from an off-site source. This section does apply to concentrations of hazardous substances in the air originating from other contaminated media or a remedial action at the site. Air cleanup standards shall be established at the following sites:

(i) Where a nonpotable ground water cleanup level is being established for volatile organic compounds using a site-specific risk assessment under WAC 173-340-720(6).

(ii) Where a soil cleanup level that addresses vapors or dust is being established under WAC 173-340-740 or 173-340-745.

(iii) Where it is necessary to establish air emission limits for a remedial action.

(iv) At other sites as determined by the department.

(b) Cleanup levels to protect air quality shall be based on estimates of the reasonable maximum exposure expected to occur under both current and future site use conditions. The department has determined that residential site use will generally require the most protective air cleanup levels and that exposure to hazardous substances under these conditions represents the reasonable maximum exposure. Air cleanup levels shall use this presumed exposure scenario and be established in accordance with subsection (3) of this section unless the site qualifies for a Method C air cleanup level. If a site qualifies for a Method C air cleanup level, subsection (4) of this section shall be used to establish air cleanup levels.

(c) In the event of a release or potential release of hazardous substances into the air at a site at which this section applies under (a) of this subsection, a cleanup action that complies with this chapter shall be conducted to address all areas of the site where the concentration of the hazardous substances in the air exceeds cleanup levels.

(d) Air cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of ground water, surface water, or soil cleanup standards established under this chapter or applicable state and federal laws. A site that qualifies for a Method C air cleanup level under this section does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(e) The department may require more stringent air cleanup standards than required by this section where, based on a site-specific evaluation, the department determines that this is necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(2) Method A air cleanup levels.

This section does not provide procedures for establishing Method A cleanup levels. Method B or C, as appropriate, shall be used to establish air cleanup levels.

(3) Method B air cleanup levels.

(a) Applicability. Method B air cleanup levels consist of standard and modified cleanup levels as described in this subsection. Either standard or modified Method B air cleanup levels may be used at any site.

(b) Standard Method B air cleanup levels. Standard Method B cleanup levels for air shall be at least as stringent as all of the following:

(i) Applicable state and federal laws. Concentrations established under applicable state and federal laws; and

(ii) Human health protection. For hazardous substances for which sufficiently protective health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which protect human health and the environment as determined by the following methods:

(A) Noncarcinogens. Concentrations that are estimated to result in no acute or chronic toxic effects on human health and are determined using the following equation and standard exposure assumptions:

[Equation 750-1]

$$\text{Air cleanup level } (\text{ug/m}^3) = \frac{\text{RfD x ABW x UCF x HQ x AT}}{\text{BR x ABS x ED x EF}}$$

Where:

RfD	=	Reference dose as specified in WAC 173-340-708(7) (mg/kg-day)
ABW	=	Average body weight over the exposure duration (16 kg)
UCF	=	Unit conversion factor (1,000 ug/mg)
BR	=	Breathing rate (10 m^3/day)
ABS	=	Inhalation absorption fraction (1.0) (unitless)
HQ	=	Hazard quotient (1) (unitless)
AT	=	Averaging time (6 years)
ED	=	Exposure duration (6 years)
EF	=	Exposure frequency (1.0) (unitless)

(B) Carcinogens. For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one million (1×10^{-6}) and are determined using the following equation and standard exposure assumptions:

[Equation 750-2]

$$\text{Air cleanup level } (\text{ug/m}^3) = \frac{\text{RISK x ABW x AT x UCF}}{\text{CPF x BR x ABS x ED x EF}}$$

Where:

RISK	=	Acceptable cancer risk level (1 in 1,000,000) (unitless)
ABW	=	Average body weight over the exposure duration (70 kg)

AT	=	Averaging time (75 years)
UCF	=	Unit conversion factor (1,000 ug/mg)
CPF	=	Carcinogenic potency factor as specified in WAC 173-340-708(8) (kg-day/mg)
BR	=	Breathing rate (20 m^3/day)
ABS	=	Inhalation absorption fraction (1.0) (unitless)
ED	=	Exposure duration (30 years)
EF	=	Exposure frequency (1.0) (unitless)

(C) Petroleum mixtures. For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated using Equation 750-1 and by taking into account the additive effects of the petroleum fractions and volatile organic compounds present in the petroleum mixture. Cleanup levels for other noncarcinogens and known or suspected carcinogens within the petroleum mixture shall be calculated using Equations 750-1 and 750-2. See Table 830-1 for the analyses required for various petroleum products to use this method.

(iii) Lower explosive limit limitation. Standard Method B air cleanup levels shall not exceed ten percent (10%) of the lower explosive limit for any hazardous substance or mixture of hazardous substances.

(c) Modified Method B air cleanup levels. Modified Method B air cleanup levels are standard Method B air cleanup levels modified with chemical-specific or site-specific data. When making these adjustments, the resultant cleanup levels shall meet applicable state and federal laws, health risk levels and explosive limit limitations required for standard Method B air cleanup levels. Changes to exposure assumptions must comply with WAC 173-340-708(10). The following adjustments may be made to the default assumptions in the standard Method B equations to derive modified Method B cleanup levels:

(i) The inhalation absorption percentage may be modified if the requirements of WAC 173-340-702 (14), (15), (16) and WAC 173-340-708(10) are met;

(ii) Adjustments to the reference dose and cancer potency factor may be made if the requirements in WAC 173-340-708 (7) and (8) are met;

(iii) The toxicity equivalency factor procedures described in WAC 173-340-708(8) may be used for assessing the potential carcinogenic risk of mixtures of chlorinated dibenzo-p-dioxins, chlorinated dibenzofurans and polycyclic aromatic hydrocarbons;

(iv) Modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16); and

(d) Using modified Method B to evaluate air remediation levels. In addition to the adjustments allowed under subsection (3)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357 and 173-340-708 (3)(d) and (10)(b).

(4) Method C air cleanup levels.

(a) Applicability. Method C air cleanup levels consist of standard and modified cleanup levels as described in this subsection. Method C air cleanup levels may be approved by the department if the person undertaking the cleanup action can demonstrate that the site qualifies for use of Method C under WAC 173-340-706(1).

(b) Standard Method C air cleanup levels. Standard Method C air cleanup levels for ambient air shall be at least as stringent as all of the following:

(i) Applicable state and federal laws. Concentrations established under applicable state and federal laws;

(ii) Human health protection. For hazardous substances for which sufficiently protective health-based criteria or standards have not been established under applicable state and federal laws, concentrations that protect human health and the environment as determined by the following methods:

(A) Noncarcinogens. Concentrations that are anticipated to result in no significant acute or chronic effects on human health and are estimated in accordance with Equation 750-1 except that the average body weight shall be 70 kg and the estimated breathing rate shall be 20 m^3/day;

(B) Carcinogens. For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand (1×10^{-5}) and are determined in accordance with Equation 750-2.

(C) Petroleum mixtures. Cleanup levels for petroleum mixtures shall be calculated as specified in subsection (3)(b)(ii)(C) of this section, except that the average body weight shall be 70 kg and the estimated breathing rate shall be 20m^3/day.

(iii) Lower explosive limit limitation. Standard Method C air cleanup levels shall not exceed ten percent (10%) of the lower explosive limit for any hazardous substance or mixture of hazardous substances.

(c) Modified Method C air cleanup levels. Modified Method C air cleanup levels are standard Method C air cleanup levels modified with chemical-specific or site-specific data. The same limitations and adjustments specified in subsection (3)(c) of this section apply to modified Method C cleanup levels.

(d) Using modified Method C to evaluate air remediation levels. In addition to the adjustments allowed under subsection (4)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357 and 173-340-708 (3)(d) and (10)(b).

(5) Adjustments to air cleanup levels.

(a) Total site risk adjustments. Air cleanup levels for individual hazardous substances developed in accordance with subsections (3) and (4) of this section, including cleanup levels based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(b) Adjustments to applicable state and federal laws. Where a cleanup level developed under subsection (3) or (4) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level must be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) Natural background and PQL considerations. Cleanup levels determined under subsection (3) or (4) of this section, including cleanup levels adjusted under (a) or (b) of this subsection, shall not be set at levels below the practical quantitation limit or natural background, whichever is higher. See WAC 173-340-709 and 173-340-707 for additional requirements pertaining to practical quantitation limits and natural background.

(6) Points of compliance. Cleanup levels established under this section shall be attained in the ambient air throughout the site. For sites determined to be industrial sites under the criteria in WAC 173-340-745, the department may approve a conditional point of compliance not to exceed the property boundary. A conditional point of compliance shall not be approved if use of a conditional point of compliance would pose a threat to human health or the environment.

(7) Compliance monitoring.

(a) Where air cleanup levels have been established at a site, monitoring may be required to be conducted to determine if compliance with the air cleanup levels has been achieved. Sampling and analytical procedures shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. The sample design shall provide data that are representative of the site.

(b) Data analysis and evaluation procedures used to evaluate compliance with air cleanup levels shall be defined in a compliance monitoring plan prepared under WAC 173-340-410.

(c) Averaging times specified in applicable state and federal laws shall be used to demonstrate compliance with those requirements.

(d) When cleanup levels are not based on applicable state and federal laws, the following averaging times shall be used:

(i) Compliance with air cleanup levels for noncarcinogens shall be based on twenty-four-hour time weighted averages except where the cleanup level is based upon an inhalation reference dose which specifies an alternate averaging time;

(ii) Compliance with air cleanup levels for carcinogens shall be based on annual average concentrations.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-750, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-750, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-760 Sediment cleanup standards. In addition to complying with the requirements in this chapter, sediment cleanup actions conducted under this chapter must comply with the requirements of chapter 173-204 WAC.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-760, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-760, filed 1/28/91, effective 2/28/91.]

PART VIII—GENERAL PROVISIONS

WAC 173-340-800 Property access. (1) Normal entry procedures. Whenever there is a reasonable basis to believe that a release or threatened release of a hazardous substance may exist, the department's authorized employees, agents or contractors may, after reasonable notice, enter upon any real property, public or private, to conduct investigations or remedial actions. The notice shall briefly describe the reason for requesting access. For the purpose of this subsection, unless earlier access is granted, reasonable notice shall mean:

(a) Written notice to the site owner and operator to the extent known to the department, sent through the United States Postal Service at least three days before entry; or

(b) Notice to the site owner and operator to the extent known to the department, in person or by telephone at least twenty-four hours before entry.

(2) Notification of property owner. The department shall ask a resident, occupant, or other persons in custody of the site to identify the name and address of owners of the property. If an owner is identified who has not been previously notified, the department shall make a prompt and reasonable effort to notify such owners of remedial actions planned or conducted.

(3) Orders and consent decrees. Whenever investigations or remedial actions are conducted under a decree or order, a potentially liable person shall not deny access to the department's authorized employees, agents, or contractors to enter and move freely about the property to oversee and verify investigations and remedial actions being performed.

(4) Ongoing operations. Persons gaining access under this section shall take all reasonable precautions to avoid disrupting the ongoing operations on a site. Such persons shall comply with all state and federal safety and health requirements that the department determines to be applicable.

(5) Access to documents. The department's authorized employees, agents or contractors may, after reasonable notice, enter property for the purpose of inspecting documents relating to a release or threatened release at the facility. Persons maintaining such documents shall:

(a) Provide access during normal business hours and allow the department to copy these documents; or

(b) At the department's request, provide legible copies of the requested documents to the department.

(6) Emergency entry. Notice by the department's authorized employees, agents, or contractors is not required for entry onto property to investigate, mitigate, or abate an emergency posed by the release or threatened release of a hazardous substance. The department will make efforts that are reasonable under the circumstances to promptly notify those owners and operators to the extent known to the department of the actions taken.

(7) Other authorities. Where consent has not been obtained for entry, the department shall secure access in a manner consistent with state and federal law, including compliance with any warrant requirements. Nothing in this chap-

ter shall affect site access authority granted under other state laws and regulations.

(8) Access by potentially liable persons. The department shall make reasonable efforts to facilitate access to real property and documents for persons who are conducting remedial actions under either an order or decree.

(9) Information sharing. The department will provide the documents and factual information on releases or threatened releases obtained through this section to persons who request such in accordance with chapter 42.17 RCW and chapter 173-03 WAC. The department does not intend application of these authorities to limit its sharing of such factual information.

(10) Split samples. Whenever the department intends to perform sampling at a site, it shall indicate in its notification under subsection (1) of this section whether sampling may occur. The person receiving notice may take split samples, provided this does not interfere with the department's sampling.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-800, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-800, filed 4/3/90, effective 5/4/90.]

WAC 173-340-810 Worker safety and health. (1) General provisions. Requirements under the Occupational Safety and Health Act of 1970 (29 U.S.C. Sec. 651 et seq.) and the Washington Industrial Safety and Health Act (chapter 49.17 RCW), and regulations promulgated pursuant thereto shall be applicable to remedial actions taken under this chapter. These requirements are subject to enforcement by the designated federal and state agencies. All governmental agencies and private employers are directly responsible for the safety and health of their own employees and compliance with those requirements. Actions taken by the department under this chapter do not constitute an exercise of statutory authority within the meaning of section (4)(b)(1) of the Occupational Safety and Health Act.

(2) Safety and health plan. Persons responsible for undertaking remedial actions under this chapter shall prepare a health and safety plan when required by chapter 296-62 WAC. Plans prepared under an order or decree shall be submitted for the department's review and comment. The safety and health plan must be consistent with chapter 49.17 RCW and regulations adopted under that authority.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-810, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-810, filed 4/3/90, effective 5/4/90.]

WAC 173-340-820 Sampling and analysis plans. (1) Purpose. A sampling and analysis plan is a document that describes the sample collection, handling, and analysis procedures to be used at a site.

(2) General requirements. A sampling and analysis plan shall be prepared for all sampling activities that are part of an investigation or a remedial action unless otherwise directed by the department and except for emergencies. The level of detail required in the sampling and analysis plan may vary with the scope and purpose of the sampling activity. Sampling and analysis plans prepared under an order or decree shall be submitted to the department for review and approval.

(3) Contents. The sampling and analysis plan shall specify procedures, that ensure sample collection, handling, and analysis will result in data of sufficient quality to plan and evaluate remedial actions at the site. Additionally, information necessary to ensure proper planning and implementation of sampling activities shall be included. References to standard protocols or procedures manuals may be used provided the information referenced is readily available to the department. The sampling and analysis plan shall contain:

(a) A statement on the purpose and objectives of the data collection, including quality assurance and quality control requirements;

(b) Organization and responsibilities for the sampling and analysis activities;

(c) Requirements for sampling activities including:

(i) Project schedule;

(ii) Identification and justification of location and frequency of sampling;

(iii) Identification and justification of parameters to be sampled and analyzed;

(iv) Procedures for installation of sampling devices;

(v) Procedures for sample collection and handling, including procedures for personnel and equipment decontamination;

(vi) Procedures for the management of waste materials generated by sampling activities, including installation of monitoring devices, in a manner that is protective of human health and the environment;

(vii) Description and number of quality assurance and quality control samples, including blanks and spikes;

(viii) Protocols for sample labeling and chain of custody; and

(ix) Provisions for splitting samples, where appropriate.

(d) Procedures for analysis of samples and reporting of results, including:

(i) Detection or quantitation limits;

(ii) Analytical techniques and procedures;

(iii) Quality assurance and quality control procedures; and

(iv) Data reporting procedures, and where appropriate, validation procedures.

The department shall make available guidance for preparation of sampling and analysis plans.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-820, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-820, filed 4/3/90, effective 5/4/90.]

WAC 173-340-830 Analytical procedures. (1) Purpose. This section specifies acceptable analytical methods and other testing requirements for sites where remedial action is being conducted under this chapter.

(2) General requirements.

(a) All hazardous substance analyses shall be conducted by a laboratory accredited under chapter 173-50 WAC, unless otherwise approved by the department.

(b) All analytical procedures used shall be conducted in accordance with a sampling and analysis plan prepared under WAC 173-340-820.

(c) Tests for which methods have not been specified in this section shall be performed using standard methods or

procedures such as those specified by the American Society for Testing of Materials, when available, unless otherwise approved by the department.

(d) Samples shall be analyzed consistent with methods appropriate for the site, the media being analyzed, the hazardous substances being analyzed for, and the anticipated use of the data.

(e) The department may require or approve modifications to the standard analytical methods identified in subsection (3) of this section to provide lower quantitation limits, improved accuracy, greater precision, or to address the factors in (d) of this subsection.

(f) Limits of quantitation. Laboratories shall achieve the lowest practical quantitation limits consistent with the selected method and WAC 173-340-707.

(g) Where there is more than one method specified in subsection (3) of this section with a practical quantitation limit less than the cleanup standard, any of the methods may be selected. In these situations, considerations in selecting a particular method may include confidence in the data, analytical costs, and considerations relating to quality assurance or analysis efficiencies.

(h) The department may require an analysis to be conducted by more than one method in order to provide higher data quality. For example, the department may require that different separation and detection techniques be used to verify the presence of a hazardous substance ("qualification") and determine the concentration of the hazardous substance ("quantitation").

(i) The minimum testing requirements for petroleum contaminated sites are identified in Table 830-1.

(3) Analytical methods.

(a) The methods used for sample collection, sample preservation, transportation, allowable time before analysis, sample preparation, analysis, method detection limits, practical quantitation limits, quality control, quality assurance and other technical requirements and specifications shall comply with the following requirements, as applicable:

(i) Method 1. **Test Methods for Evaluating Solid Waste,** Physical/Chemical Methods, U.S. EPA, SW-846, fourth update (2000);

(ii) Method 2. **Guidelines Establishing Test Procedures for the Analysis of Pollutants,** 40 C.F.R. Chapter 1, Part 136, and Appendices A, B, C, and D, U.S. EPA, July 1, 1999;

(iii) Method 3. **Standard Methods for the Examination of Water and Wastewater,** American Public Health Association, American Water Works Association, and Water Pollution Control Federation, 20th edition, 1998;

(iv) Method 4. **Recommended Protocols for Measuring Selected Environmental Variables in Puget Sound,** Puget Sound Estuary Program/Tetra Tech, 1996 edition;

(v) Method 5. **Quality Assurance Interim Guidelines for Water Quality Sampling and Analysis,** Ground Water Management Areas Program, Washington Department of Ecology, Water Quality Investigations Section, December 1986;

(vi) Method 6. **Analytical Methods for Petroleum Hydrocarbons,** Ecology publication #ECY 97-602, June 1997; or

(vii) Equivalent methods subject to approval by the department.

(b) The methods used for a particular hazardous substance at a site shall be selected in consideration of the factors in subsection (2) of this section.

(c) Ground water. Methods 1, 2, 3 and 4, as described in (a) of this subsection, may be used to determine compliance with WAC 173-340-720.

(d) Surface water. Methods 1, 2, 3, 4 and 5 as described in (a) of this subsection, may be used to determine compliance with WAC 173-340-730.

(e) Soil. Method 1, as described in (a) of this subsection, may be used to determine compliance with WAC 173-340-740 and 173-340-745.

(f) Air. Appropriate methods for determining compliance with WAC 173-340-750 shall be selected on a case-by-case basis, in consideration of the factors in subsection (2) of this section.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-830, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-830, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-830, filed 4/3/90, effective 5/4/90.]

WAC 173-340-840 General submittal requirements. Unless otherwise specified by the department, all reports, plans, specifications, and similar information submitted under this chapter shall meet the following requirements:

(1) Cover letter. Include a letter describing the submittal and specifying the desired department action or response.

(2) Number of copies. Three copies of the plan or report shall be submitted to the department's office responsible for the facility. The department may require additional copies to meet public participation and interagency coordination needs.

(3) Certification. Except as otherwise provided for in RCW 18.43.130, all engineering work submitted under this chapter shall be under the seal of a professional engineer registered with the state of Washington.

(4) Visuals. Maps, figures, photographs, and tables to clarify information or conclusions shall be legible. All maps, plan sheets, drawings, and cross-sections shall meet the following requirements:

(a) To facilitate filing and handling, be on paper no larger than 24 x 36 inches and no smaller than 8 1/2 x 11 inches. Photo-reduced copies of plan sheets may be submitted provided at least one full-sized copy of the photo-reduced sheets are included in the submittal.

(b) Identify and use appropriate and consistent scales to show all required details in sufficient clarity.

(c) Be numbered, titled, have a legend of all symbols used, and specify drafting or origination dates.

(d) Contain a north arrow.

(e) Use United States Geological Survey datum as a basis for all elevations.

(f) For planimetric views, show a survey grid based on monuments established in the field and referenced to state plane coordinates. This requirement does not apply to con-

ceptual diagrams or sketches when the exact location of items shown is not needed to convey the necessary information.

(g) Where grades are to be changed, show original topography in addition to showing the changed site topography. This requirement does not apply to conceptual diagrams or sketches where before and after topography is not needed to convey the necessary information.

(h) For cross-sections, identify the location and be cross-referenced to the appropriate planimetric view. A reduced diagram of a cross-section location map shall be included on the sheets with the cross-sections.

(5) Sampling data. All sampling data shall be submitted consistent with procedures specified by the department. Unless otherwise specified by the department, all such sampling data shall be submitted in both printed form and an electronic form capable of being transferred into the department's data management system.

(6) Appendix. An appendix providing the principal information relied upon in preparation of the submittal. This should include, for example: A complete citation of references; applicable raw data; a description of, or where readily available, reference to testing and sampling procedures used; relevant calculations; and any other information needed to facilitate review.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-840, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-840, filed 4/3/90, effective 5/4/90.]

WAC 173-340-850 Recordkeeping requirements. (1) Any remedial actions at a facility must be documented with adequate records. Such records may include: Factual information or data; relevant decision documents; and any other relevant, site-specific documents or information.

(2) Unless otherwise required by the department, records shall be retained for at least ten years from the date of completion of compliance monitoring or as long as any institutional controls (including land use restrictions) remain in effect, whichever is longer.

(3) Records shall be retained by the person taking remedial action, unless the department requires that person to submit the records to the department.

(4) The department shall maintain its records in accordance with chapter 42.17 RCW.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-850, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-850, filed 4/3/90, effective 5/4/90.]

WAC 173-340-860 Endangerment. In the event that the department determines that any activity being performed at a hazardous waste site is creating or has the potential to create a danger to human health or the environment, the department may direct such activities to cease for such period of time as it deems necessary to abate the danger.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-860, filed 4/3/90, effective 5/4/90.]

WAC 173-340-870 Project coordinator. The potentially liable person shall designate a project coordinator for work performed under an order or decree. The project coordinator shall be the designated representative for the purposes of the order or decree. That person shall coordinate with the department and the public and shall facilitate compliance with requirements of the order or decree.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-870, filed 4/3/90, effective 5/4/90.]

WAC 173-340-880 Emergency actions. Nothing in this chapter shall limit the authority of the department, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-880, filed 4/3/90, effective 5/4/90.]

WAC 173-340-890 Severability. If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of this chapter or the application of the provision to other persons or circumstances shall not be affected.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-890, filed 4/3/90, effective 5/4/90.]

WAC 173-340-900 Tables.

Table 720-1

Method A Cleanup Levels for Ground Water.[a]

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	5 ug/liter[b]
Benzene	71-43-2	5 ug/liter[c]
Benzo(a)pyrene	50-32-8	0.1 ug/liter[d]
Cadmium	7440-43-9	5 ug/liter[e]
Chromium (Total)	7440-47-3	50 ug/liter[f]
DDT	50-29-3	0.3 ug/liter[g]
1,2 Dichloroethane (EDC)	107-06-2	5 ug/liter[h]
Ethylbenzene	100-41-4	700 ug/liter[i]
Ethylene dibromide (EDB)	106-93-4	0.01 ug/liter[j]
Gross Alpha Particle Activity		15 pCi/liter[k]
Gross Beta Particle Activity		4 mrem/yr[l]
Lead	7439-92-1	15 ug/liter[m]
Lindane	58-89-9	0.2 ug/liter[n]
Methylene chloride	75-09-2	5 ug/liter[o]
Mercury	7439-97-6	2 ug/liter[p]
MTBE	1634-04-4	20 ug/liter[q]
Naphthalenes	91-20-3	160 ug/liter[r]
PAHs (carcinogenic)		See benzo(a)pyrene[d]
PCB mixtures		0.1 ug/liter[s]
Radium 226 and 228		5 pCi/liter[t]
Radium 226		3 pCi/liter[u]
Tetrachloroethylene	127-18-4	5 ug/liter[v]
Toluene	108-88-3	1,000 ug/liter[w]
Total Petroleum Hydrocarbons[x]		
[Note: Must also test for and meet cleanup levels for other petroleum components—see footnotes!]		
Gasoline Range Organics		
Benzene present in ground water		800 ug/liter
No detectable benzene in ground water		1,000 ug/liter
Diesel Range Organics		500 ug/liter
Heavy Oils		500 ug/liter
Mineral Oil		500 ug/liter
1,1,1 Trichloroethane	71-55-6	200 ug/liter[y]
Trichloroethylene	79-01-6	5 ug/liter[z]
Vinyl chloride	75-01-4	0.2 ug/liter[aa]
Xylenes	1330-20-7	1,000 ug/liter[bb]

Footnotes:

a **Caution on misusing this table.** This table has been developed for specific purposes. It is intended to provide conservative cleanup levels for drinking water beneficial uses at sites undergoing routine cleanup actions or those sites with relatively few hazardous substances. This table may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in this table should not automatically be used to define cleanup levels that must be met for financial, real estate, insurance coverage or placement, or similar transactions or purposes. Exceedances of the values in this table do not necessarily mean the ground water must be restored to those levels at all sites. The level of restoration depends on the remedy selected under WAC 173-340-350 through 173-340-390.

b **Arsenic.** Cleanup level based on background concentrations for state of Washington.

c **Benzene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

d **Benzo(a)pyrene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61), adjusted to a 1×10^{-5} risk. If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).

e **Cadmium.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.62).

f **Chromium (Total).** Cleanup level based on concentration derived using Equation 720-1 for hexavalent chromium. This is a total value for chromium III and chromium VI. If just chromium III is present at the site, a cleanup level of 100 ug/l may be used (based on WAC 246-290-310 and 40 C.F.R. 141.62).

g **DDT (dichlorodiphenyltrichloroethane).** Cleanup levels based on concentration derived using Equation 720-2.

h **1,2 Dichloroethane (ethylene dichloride or EDC).** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

i **Ethylbenzene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

j **Ethylene dibromide (1,2 dibromoethane or EDB).** Cleanup level based on concentration derived using Equation 720-2, adjusted for the practical quantitation limit.

k **Gross Alpha Particle Activity, excluding uranium.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.15).

l **Gross Beta Particle Activity, including gamma activity.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.15).

m **Lead.** Cleanup level based on applicable state and federal law (40 C.F.R. 141.80).

n **Lindane.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

o **Methylene chloride (dichloromethane).** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

p **Mercury.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.62).

q **Methyl tertiary-butyl ether (MTBE).** Cleanup level based on federal drinking water advisory level (EPA-822-F-97-009, December 1997).

r **Naphthalenes.** Cleanup level based on concentration derived using Equation 720-1. This is a total value for naphthalene, 1-methyl naphthalene and 2-methyl naphthalene.

s **PCB mixtures.** Cleanup level based on concentration derived using Equation 720-2, adjusted for the practical quantitation limit. This cleanup level is a total value for all PCBs.

t **Radium 226 and 228.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.15).

u **Radium 226.** Cleanup level based on applicable state law (WAC 246-290-310).

v **Tetrachloroethylene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

w **Toluene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

x **Total Petroleum Hydrocarbons (TPH).** TPH cleanup values have been provided for the most common petroleum products encountered at contaminated sites. Where there is a mixture of products or the product composition is unknown, samples must be tested using both the NWTPH-Gx and NWTPH-Dx methods and the lowest applicable TPH cleanup level must be met.

- **Gasoline range organics** means organic compounds measured using method NWTPH-Gx. Examples are aviation and automotive gasoline. The cleanup level is based on protection of ground water for noncarcinogenic effects during drinking water use. Two cleanup levels are provided. The higher value is based on the assumption that no benzene is present in the ground water sample. If any detectable amount of benzene is present in the ground water sample, then the lower TPH cleanup level must be used. No interpolation between these cleanup levels is allowed. The ground water cleanup level for any carcinogenic components of the petroleum [such as benzene, EDB and EDC] and any noncarcinogenic components [such as ethylbenzene, toluene, xylenes and MTBE], if present at the site, must also be met. See Table 830-1 for the minimum testing requirements for gasoline releases.
- **Diesel range organics** means organic compounds measured using NWTPH-Dx. Examples are diesel, kerosene, and #1 and #2 heating oil. The cleanup level is based on protection from noncarcinogenic effects during drinking water use. The ground water cleanup level for any carcinogenic components of the petroleum [such as benzene and PAHs] and any noncarcinogenic components [such as ethylbenzene, toluene, xylenes and naphthalenes], if present at the site, must also be met. See Table 830-1 for the minimum testing requirements for diesel releases.
- **Heavy oils** means organic compounds measured using NWTPH-Dx. Examples are #6 fuel oil, bunker C oil, hydraulic oil and waste oil. The cleanup level is based on protection from noncarcinogenic effects during drinking water use, assuming a product composition similar to diesel fuel. The ground water cleanup level for any carcinogenic components of the petroleum [such as benzene, PAHs and PCBs] and any noncarcinogenic components [such as ethylbenzene, toluene, xylenes and naphthalenes], if present at the site, must also be met. See Table 830-1 for the minimum testing requirements for heavy oil releases.
- **Mineral oil** means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors measured using NWTPH-Dx. The cleanup level is based on protection from noncarcinogenic effects during drinking water use. Sites using this cleanup level must analyze ground water samples for PCBs and meet the PCB cleanup level in this table unless it can be demonstrated that: (1) The release originated from an electrical device manufactured after July 1, 1979; or (2) oil containing PCBs was never used in the equipment suspected as the source of the release; or (3) it can be documented that the oil released was recently tested and did not contain PCBs. Method B (or Method C, if applicable) must be used for releases of oils containing greater than 50 ppm PCBs. See Table 830-1 for the minimum testing requirements for mineral oil releases.

y **1,1,1 Trichloroethane.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

z **Trichloroethylene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

aa **Vinyl chloride.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61), adjusted to a 1×10^{-5} risk.

bb **Xylenes.** Cleanup level based on xylene not exceeding the maximum allowed cleanup level in this table for total petroleum hydrocarbons and on prevention of adverse aesthetic characteristics. This is a total value for all xylenes.

Table 740-1

Method A Soil Cleanup Levels for Unrestricted Land Uses.[a]

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	20 mg/kg[b]
Benzene	71-43-2	0.03 mg/kg[c]
Benzo(a)pyrene	50-32-8	0.1 mg/kg[d]
Cadmium	7440-43-9	2 mg/kg[e]
Chromium		
Chromium VI	18540-29-9	19 mg/kg[f1]
Chromium III	16065-83-1	2,000 mg/kg[f2]
DDT	50-29-3	3 mg/kg[g]
Ethylbenzene	100-41-4	6 mg/kg[h]
Ethylene dibromide (EDB)	106-93-4	0.005 mg/kg[i]
Lead	7439-92-1	250 mg/kg[j]
Lindane	58-89-9	0.01 mg/kg[k]
Methylene chloride	75-09-2	0.02 mg/kg[l]
Mercury (inorganic)	7439-97-6	2 mg/kg[m]
MTBE	1634-04-4	0.1 mg/kg[n]
Naphthalenes	91-20-3	5 mg/kg[o]
PAHs (carcinogenic)		See benzo(a)pyrene[d]
PCB Mixtures		1 mg/kg[p]

Hazardous Substance	CAS Number	Cleanup Level
Tetrachloroethylene	127-18-4	0.05 mg/kg[q]
Toluene	108-88-3	7 mg/kg[r]
Total Petroleum Hydrocarbons[s]		
[Note: Must also test for and meet cleanup levels for other petroleum components—see footnotes!]		
Gasoline Range Organics		
Gasoline mixtures without benzene and the total of ethylbenzene, toluene and xylene are less than 1% of the gasoline mixture		100 mg/kg
All other gasoline mixtures		30 mg/kg
Diesel Range Organics		2,000 mg/kg
Heavy Oils		2,000 mg/kg
Mineral Oil		4,000 mg/kg
1,1,1 Trichloroethane	71-55-6	2 mg/kg[t]
Trichloroethylene	79-01-6	0.03 mg/kg[u]
Xylenes	1330-20-7	9 mg/kg[v]

Footnotes:

a **Caution on misusing this table.** This table has been developed for specific purposes. It is intended to provide conservative cleanup levels for sites undergoing routine cleanup actions or for sites with relatively few hazardous substances, and the site qualifies under WAC 173-340-7491 for an exclusion from conducting a simplified or site-specific terrestrial ecological evaluation, or it can be demonstrated using a terrestrial ecological evaluation under WAC 173-340-7492 or 173-340-7493 that the values in this table are ecologically protective for the site. This table may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in this table should not automatically be used to define cleanup levels that must be met for financial, real estate, insurance coverage or placement, or similar transactions or purposes. Exceedances of the values in this table do not necessarily mean the soil must be restored to these levels at a site. The level of restoration depends on the remedy selected under WAC 173-340-350 through 173-340-390.

b **Arsenic.** Cleanup level based on direct contact using Equation 740-2 and protection of ground water for drinking water use using the procedures in WAC 173-340-747(4), adjusted for natural background for soil.

c **Benzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures in WAC 173-340-747 (4) and (6).

d **Benzo(a)pyrene.** Cleanup level based on direct contact using Equation 740-2. If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).

e **Cadmium.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil.

f1 **Chromium VI.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

f2 **Chromium III.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). Chromium VI must also be tested for and the cleanup level met when present at a site.

g **DDT (dichlorodiphenyltrichloroethane).** Cleanup level based on direct contact using Equation 740-2.

h **Ethylbenzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

i **Ethylene dibromide (1,2 dibromoethane or EDB).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil.

j **Lead.** Cleanup level based on preventing unacceptable blood lead levels.

k **Lindane.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit.

l **Methylene chloride (dichloromethane).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

m **Mercury.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

n **Methyl tertiary-butyl ether (MTBE).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

o **Naphthalenes.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). This is a total value for naphthalene, 1-methyl naphthalene and 2-methyl naphthalene.

p **PCB Mixtures.** Cleanup level based on applicable federal law (40 C.F.R. 761.61). This is a total value for all PCBs.

q **Tetrachloroethylene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

r **Toluene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

s **Total Petroleum Hydrocarbons (TPH).** TPH cleanup values have been provided for the most common petroleum products encountered at contaminated sites. Where there is a mixture of products or the product composition is unknown, samples must be tested using both the NWTPH-Gx and NWTPH-Dx methods and the lowest applicable TPH cleanup level must be met.

- **Gasoline range organics** means organic compounds measured using method NWTPH-Gx. Examples are aviation and automotive gasoline. The cleanup level is based on protection of ground water for noncarcinogenic effects during drinking water use using the procedures described in WAC 173-340-747(6). Two cleanup levels are provided. The lower value of 30 mg/kg can be used at any site. When using this lower value, the soil must also be tested for and meet the benzene soil cleanup level. The higher value of 100 mg/kg can only be used if the soil is tested and found to contain no benzene and the total of ethylbenzene, toluene and xylene are less than 1% of the gasoline mixture. No interpolation between these cleanup levels is allowed. In both cases, the soil cleanup level for any other carcinogenic components of the petroleum [such as EDB and EDC], if present at the site, must also be met. Also, in both cases, soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes, naphthalene, and MTBE], also must be met if these substances are found to exceed ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for gasoline releases.

- **Diesel range organics** means organic compounds measured using method NWTPH-Dx. Examples are diesel, kerosene, and #1 and #2 heating oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). The soil cleanup level for any carcinogenic components of the petroleum [such as benzene and PAHs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if these substances are found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for diesel releases.

- **Heavy oils** means organic compounds measured using NWTPH-Dx. Examples are #6 fuel oil, bunker C oil, hydraulic oil and waste oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10) and assuming a product composition similar to diesel fuel. The soil cleanup level for any carcinogenic components of the petroleum [such as benzene, PAHs and PCBs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for heavy oil releases.

- **Mineral oil** means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors, measured using NWTPH-Dx. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). Sites using this cleanup level must also analyze soil samples and meet the soil cleanup level for PCBs, unless it can be demonstrated that: (1) The release originated from an electrical device that was manufactured after July 1, 1979; or (2) oil containing PCBs was never used in the equipment suspected as the source of the release; or (3) it can be documented that the oil released was recently tested and did not contain PCBs. Method B must be used for releases of oils containing greater than 50 ppm PCBs. See Table 830-1 for the minimum testing requirements for mineral oil releases.

t **1,1,1 Trichloroethane.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

u **Trichloroethylene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

v **Xylenes.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). This is a total value for all xylenes.

Table 745-1

Method A Soil Cleanup Levels for Industrial Properties.[a]

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	20 mg/kg[b]
Benzene	71-43-2	0.03 mg/kg[c]
Benzo(a)pyrene	50-32-8	2 mg/kg[d]
Cadmium	7440-43-9	2 mg/kg[e]
Chromium		
Chromium VI	18540-29-9	19 mg/kg[f1]
Chromium III	16065-83-1	2,000 mg/kg[f2]
DDT	50-29-3	4 mg/kg[g]
Ethylbenzene	100-41-4	6 mg/kg[h]
Ethylene dibromide (EDB)	106-93-4	0.005 mg/kg[i]
Lead	7439-92-1	1,000 mg/kg[j]
Lindane	58-89-9	0.01 mg/kg[k]
Methylene chloride	75-09-2	0.02 mg/kg[l]
Mercury (inorganic)	7439-97-6	2 mg/kg[m]
MTBE	1634-04-4	0.1 mg/kg[n]
Naphthalene	91-20-3	5 mg/kg[o]
PAHs (carcinogenic)		See benzo(a)pyrene[d]
PCB Mixtures		10 mg/kg[p]
Tetrachloroethylene	127-18-4	0.05 mg/kg[q]
Toluene	108-88-3	7 mg/kg[r]
Total Petroleum Hydrocarbons[s]		
[Note: Must also test for and meet cleanup levels for other petroleum components—see footnotes!]		
Gasoline Range Organics		
Gasoline mixtures without benzene and the total of ethylbenzene, toluene and xylene are less than 1% of the gasoline mixture		100 mg/kg
All other gasoline mixtures		30 mg/kg
Diesel Range Organics		2,000 mg/kg
Heavy Oils		2,000 mg/kg
Mineral Oil		4,000 mg/kg
1,1,1 Trichloroethane	71-55-6	2 mg/kg[t]
Trichloroethylene	79-01-6	0.03 mg/kg[u]
Xylenes	1330-20-7	9 mg/kg[v]

Footnotes:

a **Caution on misusing this table.** This table has been developed for specific purposes. It is intended to provide conservative cleanup levels for sites undergoing routine cleanup actions or for industrial properties with relatively few hazardous substances, and the site qualifies under WAC 173-340-7491 for an exclusion from conducting a simplified or site-specific terrestrial ecological evaluation, or it can be demonstrated using a terrestrial ecological evaluation under WAC 173-340-7492 or 173-340-7493 that the values in this table are ecologically protective for the site. This table may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in this table should not automatically be used to define cleanup levels that must be met for financial, real estate, insurance coverage or placement, or similar transactions or purposes. Exceedances of the values in this table do not necessarily mean the soil must be restored to these levels at a site. The level of restoration depends on the remedy selected under WAC 173-340-350 through 173-340-390.

b **Arsenic.** Cleanup level based on protection of ground water for drinking water use, using the procedures in WAC 173-340-747(4), adjusted for natural background for soil.

c **Benzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747 (4) and (6).

d **Benzo(a)pyrene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).

e **Cadmium.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil.

f1 **Chromium VI.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

f2 **Chromium III.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). Chromium VI must also be tested for and the cleanup level met when present at a site.

g **DDT (dichlorodiphenyltrichloroethane).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

h **Ethylbenzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

i **Ethylene dibromide (1,2 dibromoethane or EDB).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil.

j **Lead.** Cleanup level based on direct contact.

k **Lindane.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit.

l **Methylene chloride (dichloromethane).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

m **Mercury.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

n **Methyl tertiary-butyl ether (MTBE).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

o **Naphthalenes.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). This is a total value for naphthalene, 1-methyl naphthalene and 2-methyl naphthalene.

p **PCB Mixtures.** Cleanup level based on applicable federal law (40 C.F.R. 761.61). This is a total value for all PCBs. This value may be used only if the PCB contaminated soils are capped and the cap maintained as required by 40 C.F.R. 761.61. If this condition cannot be met, the value in Table 740-1 must be used.

q **Tetrachloroethylene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

r **Toluene.** Cleanup level based on protection of ground water for drinking water use, using the procedure described in WAC 173-340-747(4).

s **Total Petroleum Hydrocarbons (TPH).** TPH cleanup values have been provided for the most common petroleum products encountered at contaminated sites. Where there is a mixture of products or the product composition is unknown, samples must be tested using both the NWTPH-Gx and NWTPH-Dx methods and the lowest applicable TPH cleanup level must be met.

• **Gasoline range organics** means organic compounds measured using method NWTPH-Gx. Examples are aviation and automotive gasoline. The cleanup level is based on protection of ground water for noncarcinogenic effects during drinking water use using the procedures described in WAC 173-340-747(6). Two cleanup levels are provided. The lower value of 30 mg/kg can be used at any site. When using this lower value, the soil must also be tested for and meet the benzene soil cleanup level. The higher value of 100 mg/kg can only be used if the soil is tested and found to contain no benzene and the total of ethylbenzene, toluene and xylene are less than 1% of the gasoline mixture. No interpolation between these cleanup levels is allowed. In both cases, the soil cleanup level for any other carcinogenic components of the petroleum [such as EDB and EDC], if present at the site, must also be met. Also, in both cases, soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes, naphthalene, and MTBE], also must be met if these substances are

found to exceed ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for gasoline releases.

- **Diesel range organics** means organic compounds measured using method NWTPH-Dx. Examples are diesel, kerosene, and #1 and #2 heating oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). The soil cleanup level for any carcinogenic components of the petroleum [such as benzene, and PAHs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if these substances are found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for diesel releases.
- **Heavy oils** means organic compounds measured using NWTPH-Dx. Examples are #6 fuel oil, bunker C oil, hydraulic oil and waste oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10) and assuming a product composition similar to diesel fuel. The soil cleanup level for any carcinogenic components of the petroleum [such as benzene, PAHs and PCBs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for heavy oil releases.
- **Mineral oil** means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors, measured using NWTPH-Dx. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). Sites using this cleanup level must also analyze soil samples and meet the soil cleanup level for PCBs, unless it can be demonstrated that: (1) The release originated from an electrical device that was manufactured after July 1, 1979; or (2) oil containing PCBs was never used in the equipment suspected as the source of the release; or (3) it can be documented that the oil released was recently tested and did not contain PCBs. Method B or C must be used for releases of oils containing greater than 50 ppm PCBs. See Table 830-1 for the minimum testing requirements for mineral oil releases.

t **1,1,1 Trichloroethane.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

u **Trichloroethylene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

v **Xylenes.** Cleanup level based on protection of ground water for drinking water use, using the procedure in WAC 173-340-747(4). This is a total value for all xylenes.

Table 747-1
Soil Organic Carbon-Water Partitioning Coefficient (K_{oc}) Values: Nonionizing Organics.

Hazardous Substance	K_{oc} (ml/g)
ACENAPHTHENE	4,898
ALDRIN	48,685
ANTHRACENE	23,493
BENZ(a)ANTHRACENE	357,537
BENZENE	62
BENZO(a)PYRENE	968,774
BIS(2-CHLOROETHYL)ETHER	76
BIS(2-ETHYLHEXYL)PHTHALATE	111,123
BROMOFORM	126
BUTYL BENZYL PHTHALATE	13,746
CARBON TETRACHLORIDE	152
CHLORDANE	51,310
CHLOROBENZENE	224
CHLOROFORM	53
DDD	45,800
DDE	86,405
DDT	677,934
DIBENZO(a,h)ANTHRACENE	1,789,101
1,2-DICHLOROBENZENE (o)	379
1,4-DICHLOROBENZENE (p)	616
DICHLOROETHANE-1,1	53
DICHLOROETHANE-1,2	38
DICHLOROETHYLENE-1,1	65
trans-1,2 DICHLOROETHYLENE	38
DICHLOROPROPANE-1,2	47
DICHLOROPROPENE-1,3	27
DIELDRIN	25,546
DIETHYL PHTHALATE	82
DI-N-BUTYLPHTHALATE	1,567
EDB	66
ENDRIN	10,811
ENDOSULFAN	2,040
ETHYL BENZENE	204
FLUORANTHENE	49,096
FLUORENE	7,707
HEPTACHLOR	9,528
HEXACHLOROBENZENE	80,000
α-HCH (α-BHC)	1,762
β-HCH (β-BHC)	2,139
γ-HCH (LINDANE)	1,352
MTBE	11
METHOXYCHLOR	80,000
METHYL BROMIDE	9
METHYL CHLORIDE	6
METHYLENE CHLORIDE	10
NAPHTHALENE	1,191
NITROBENZENE	119
PCB-Arochlor 1016	107,285
PCB-Arochlor 1260	822,422
PENTACHLOROBENZENE	32,148
PYRENE	67,992
STYRENE	912
1,1,2,2,-TETRACHLOROETHANE	79
TETRACHLOROETHYLENE	265
TOLUENE	140
TOXAPHENE	95,816
1,2,4-TRICHLOROBENZENE	1,659
TRICHLOROETHANE -1,1,1	135
TRICHLOROETHANE-1,1,2	75
TRICHLOROETHYLENE	94
o-XYLENE	241
m-XYLENE	196
p-XYLENE	311

Sources: Except as noted below, the source of the K_{oc} values is the 1996 *EPA Soil Screening Guidance: Technical Background Document*. The values obtained from this document represent the geometric mean of a survey of values published in the scientific literature. Sample populations ranged from 1-65. EDB value from *ATSDR Toxicological Profile* (TP 91/13). MTBE value from *USGS Final Draft Report on Fuel Oxygenates* (March 1996). PCB-Arochlor values from 1994 *EPA Draft Soil Screening Guidance*.

Table 747-2
Predicted Soil Organic Carbon-Water Partitioning Coefficient (K_{oc}) as a Function of pH: Ionizing Organics.

Hazardous Substance	K_{oc} Value (ml/g)		
	pH = 4.9	pH = 6.8	pH = 8.0
Benzoic acid	5.5	0.6	0.5
2-Chlorophenol	398	388	286
2-4-Dichlorophenol	159	147	72

Table 747-2
Predicted Soil Organic Carbon-Water Partitioning Coefficient (K_{oc}) as a Function of pH: Ionizing Organics.

Hazardous Substance	K_{oc} Value (ml/g)		
2-4-Dinitrophenol	0.03	0.01	0.01
Pentachlorophenol	9,055	592	410
2,3,4,5-Tetrachlorophenol	17,304	4,742	458
2,3,4,6-Tetrachlorophenol	4,454	280	105
2,4,5-Trichlorophenol	2,385	1,597	298
2,4,6-Trichlorophenol	1,040	381	131

Source: 1996 *EPA Soil Screening Guidance: Technical Background Document*. The predicted K_{oc} values in this table were derived using a relationship from thermodynamic equilibrium considerations to predict the total sorption of an ionizable organic compound from the partitioning of its ionized and neutral forms.

Table 747-3
Metals Distribution Coefficients (K_d).

Hazardous Substance	K_d (L/kg)
Arsenic	29
Cadmium	6.7
Total Chromium	1,000
Chromium VI	19
Copper	22
Mercury	52
Nickel	65
Lead	10,000
Selenium	5
Zinc	62

Source: Multiple sources compiled by the department of ecology.

Table 747-4
Petroleum EC Fraction Physical/Chemical Values.

Fuel Fraction	Equivalent Carbon Number[1]	Water Solubility[2] (mg/L)	Mol. Wt.[3] (g/mol)	Henry's Constant[4] (cc/cc)	GFW[5] (mg/mol)	Density[6] (mg/l)	Soil Organic Carbon-Water Partitioning Coefficient K_{oc}[7] (L/kg)
ALIPHATICS							
EC 5 - 6	5.5	36.0	81.0	33.0	81,000	670,000	800
EC > 6 - 8	7.0	5.4	100.0	50.0	100,000	700,000	3,800
EC > 8 - 10	9.0	0.43	130.0	80.0	130,000	730,000	30,200
EC > 10 - 12	11.0	0.034	160.0	120.0	160,000	750,000	234,000
EC > 12 - 16	14.0	7.6E-04	200.0	520.0	200,000	770,000	5.37E+06
EC > 16 - 21	19.0	1.3E-06	270.0	4,900	270,000	780,000	9.55E+09
EC > 21 - 34	28.0	1.5E-11	400.0	100,000	400,000	790,000	1.07E+10
AROMATICS							
EC > 8 - 10	9.0	65.0	120.0	0.48	120,000	870,000	1,580
EC > 10 - 12	11.0	25.0	130.0	0.14	130,000	900,000	2,510
EC > 12 - 16	14.0	5.8	150.0	0.053	150,000	1,000,000	5,010
EC > 16 - 21	19.0	0.51	190.0	0.013	190,000	1,160,000	15,800
EC > 21 - 34	28.0	6.6E-03	240.0	6.7E-04	240,000	1,300,000	126,000
TPH COMPONENTS							
Benzene	6.5	1,750	78.0	0.228	78,000	876,500	62.0
Toluene	7.6	526.0	92.0	0.272	92,000	866,900	140.0
Ethylbenzene	8.5	169.0	106.0	0.323	106,000	867,000	204.0
Total Xylenes[8] (average of 3)	8.67	171.0	106.0	0.279	106,000	875,170	233.0
n-Hexane[9]	6.0	9.5	86.0	74.0	86,000	659,370	3,410
MTBE[10]		50,000	88.0	0.018	88,000	744,000	10.9
Naphthalenes	11.69	31.0	128.0	0.0198	128,000	1,145,000	1,191

Sources:

1 **Equivalent Carbon Number.** Gustafson, J.B. et al., *Selection of Representative TPH Fractions Based on Fate and Transport Considerations. Total Petroleum Hydrocarbon Criteria Working Group Series*, Volume 3 (1997) [hereinafter *Criteria Working Group*].

2 **Water Solubility.** For aliphatics and aromatics EC groups, *Criteria Working Group.* For TPH components except n-hexane and MTBE, *1996 EPA Soil Screening Guidance: Technical Background Document.*

3 **Molecular Weight.** *Criteria Working Group.*

4 **Henry's Constant.** For aliphatics and aromatics EC groups, *Criteria Working Group*. For TPH components except n-hexane and MTBE, *1996 EPA Soil Screening Guidance: Technical Background Document.*

5 **Gram Formula Weight (GFW).** Based on 1000 x Molecular Weight.

6 **Density.** For aliphatics and aromatics EC groups, based on correlation between equivalent carbon number and data on densities of individual hazardous substances provided in *Criteria Working Group.* For TPH components except n-hexane and MTBE, *1996 EPA Soil Screening Guidance: Technical Background Document.*

7 **Soil Organic Carbon-Water Partitioning Coefficient.** For aliphatics and aromatics EC groups, *Criteria Working Group.* For TPH components except n-hexane and MTBE, *1996 EPA Soil Screening Guidance: Technical Background Document.*

8 **Total Xylenes.** Values for total xylenes are a weighted average of m, o and p xylene based on gasoline composition data from the *Criteria Working Group* (m= 51% of total xylene; o= 28% of total xylene; and p=21% of total xylene).

9 **n-Hexane.** For values other than density, *Criteria Working Group*. For the density value, *Hawley's Condensed Chemical Dictionary,* 11th ed., revised by N. Irving Sax and Richard J. Lewis (1987).

10 **MTBE.** *USGS Final Report on Fuel Oxygenates* (March 1996).

Table 747-5
Residual Saturation Screening Levels for TPH.

Fuel	Screening Level (mg/kg)
Weathered Gasoline	1,000
Middle Distillates (e.g., Diesel No. 2 Fuel Oil)	2,000
Heavy Fuel Oils (e.g., No. 6 Fuel Oil)	2,000
Mineral Oil	4,000
Unknown Composition or Type	1,000

Note: The residual saturation screening levels for petroleum hydrocarbons specified in Table 747-5 are based on coarse sand and gravelly soils; however, they may be used for any soil type. Screening levels are based on the presumption that there are no preferential pathways for NAPL to flow downward to ground water. If such pathways exist, more stringent residual saturation screening levels may need to be established.

Table 749-1
Simplified Terrestrial Ecological Evaluation - Exposure Analysis Procedure under WAC 173-340-7492 (2)(a)(ii).[a]

Estimate the area of contiguous (connected) undeveloped land on the site or within 500 feet of any area of the site to the nearest 1/2 acre (1/4 acre if the area is less than 0.5 acre). "Undeveloped land" means land that is not covered by existing buildings, roads, paved areas or other barriers that will prevent wildlife from feeding on plants, earthworms, insects or other food in or on the soil.	
1) From the table below, find the number of points corresponding to the area and enter this number in the box to the right.	
Area (acres) / Points 0.25 or less / 4 0.5 / 5 1.0 / 6 1.5 / 7 2.0 / 8 2.5 / 9 3.0 / 10 3.5 / 11 4.0 or more / 12	
2) Is this an industrial or commercial property? See WAC 173-340-7490 (3)(c). If yes, enter a score of 3 in the box to the right. If no, enter a score of 1.	
3) Enter a score in the box to the right for the habitat quality of the site, using the rating system shown below[b]. (High = 1, Intermediate = 2, Low = 3)	
4) Is the undeveloped land likely to attract wildlife? If yes, enter a score of 1 in the box to the right. If no, enter a score of 2. See footnote c.	
5) Are there any of the following soil contaminants present: Chlorinated dioxins/furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, pentachlorobenzene? If yes, enter a score of 1 in the box to the right. If no, enter a score of 4.	
6) Add the numbers in the boxes on lines 2 through 5 and enter this number in the box to the right. If this number is larger than the number in the box on line 1, the simplified terrestrial ecological evaluation may be ended under WAC 173-340-7492 (2)(a)(ii).	

Footnotes:

a It is expected that this habitat evaluation will be undertaken by an experienced field biologist. If this is not the case, enter a conservative score (1) for questions 3 and 4.

b Habitat rating system. Rate the quality of the habitat as high, intermediate or low based on your professional judgment as a field biologist. The following are suggested factors to consider in making this evaluation:
Low: Early successional vegetative stands; vegetation predominantly noxious, nonnative, exotic plant species or weeds. Areas severely disturbed by human activity, including intensively cultivated croplands. Areas isolated from other habitat used by wildlife.
High: Area is ecologically significant for one or more of the following reasons: Late-successional native plant communities present; relatively high species diversity; used by an uncommon or rare species; priority habitat (as defined by the Washington department of fish and wildlife); part of a larger area of habitat where size or fragmentation may be important for the retention of some species.
Intermediate: Area does not rate as either high or low.

c Indicate "yes" if the area attracts wildlife or is likely to do so. Examples: Birds frequently visit the area to feed; evidence of high use by mammals (tracks, scat, etc.); habitat "island" in an industrial area; unusual features of an area that make it important for feeding animals; heavy use during seasonal migrations.

Table 749-2
Priority Contaminants of Ecological Concern for Sites that Qualify for the Simplified Terrestrial Ecological Evaluation Procedure.[a]

Priority contaminant	Soil concentration (mg/kg)	
	Unrestricted land use[b]	Industrial or commercial site
METALS[c]		
Antimony	See note d	See note d
Arsenic III	20 mg/kg	20 mg/kg
Arsenic V	95 mg/kg	260 mg/kg
Barium	1,250 mg/kg	1,320 mg/kg
Beryllium	25 mg/kg	See note d
Cadmium	25 mg/kg	36 mg/kg
Chromium (total)	42 mg/kg	135 mg/kg
Cobalt	See note d	See note d
Copper	100 mg/kg	550 mg/kg
Lead	220 mg/kg	220 mg/kg
Magnesium	See note d	See note d
Manganese	See note d	23,500 mg/kg
Mercury, inorganic	9 mg/kg	9 mg/kg
Mercury, organic	0.7 mg/kg	0.7 mg/kg
Molybdenum	See note d	71 mg/kg
Nickel	100 mg/kg	1,850 mg/kg
Selenium	0.8 mg/kg	0.8 mg/kg
Silver	See note d	See note d
Tin	275 mg/kg	See note d
Vanadium	26 mg/kg	See note d

Priority contaminant	Soil concentration (mg/kg)	
	Unrestricted land use[b]	Industrial or commercial site
Zinc	270 mg/kg	570 mg/kg
PESTICIDES		
Aldicarb/aldicarb sulfone (total)	See note d	See note d
Aldrin	0.17 mg/kg	0.17 mg/kg
Benzene hexachloride (including lindane)	10 mg/kg	10 mg/kg
Carbofuran	See note d	See note d
Chlordane	1 mg/kg	7 mg/kg
Chlorpyrifos/chlorpyrifos-methyl (total)	See note d	See note d
DDT/DDD/DDE (total)	1 mg/kg	1 mg/kg
Dieldrin	0.17 mg/kg	0.17 mg/kg
Endosulfan	See note d	See note d
Endrin	0.4 mg/kg	0.4 mg/kg
Heptachlor/heptachlor epoxide (total)	0.6 mg/kg	0.6 mg/kg
Hexachlorobenzene	31 mg/kg	31 mg/kg
Parathion/methyl parathion (total)	See note d	See note d
Pentachlorophenol	11 mg/kg	11 mg/kg
Toxaphene	See note d	See note d
OTHER CHLORINATED ORGANICS		
Chlorinated dibenzofurans (total)	3E-06 mg/kg	3E-06 mg/kg
Dioxins (total)	5E-06 mg/kg	5E-06 mg/kg
Hexachlorophene	See note d	See note d
PCB mixtures (total)	2 mg/kg	2 mg/kg
Pentachlorobenzene	168 mg/kg	See note d
OTHER NONCHLORINATED ORGANICS		
Acenaphthene	See note d	See note d
Benzo(a)pyrene	30 mg/kg	300 mg/kg
Bis (2-ethylhexyl) phthalate	See note d	See note d
Di-n-butyl phthalate	200 mg/kg	See note d
PETROLEUM		
Gasoline Range Organics	200 mg/kg	12,000 mg/kg except that the concentration shall not exceed residual saturation at the soil surface.
Diesel Range Organics	460 mg/kg	15,000 mg/kg except that the concentration shall not exceed residual saturation at the soil surface.

Footnotes:

a Caution on misusing these chemical concentration numbers. These values have been developed for use at sites where a site-specific terrestrial ecological evaluation is not required. They are not intended to be protective of terrestrial ecological receptors at every site. Exceedances of the values in this table do not necessarily trigger requirements for cleanup action under this chapter. The table is not intended for purposes such as evaluating sludges or wastes.

This list does not imply that sampling must be conducted for each of these chemicals at every site. Sampling should be conducted for those chemicals that might be present based on available information, such as current and past uses of chemicals at the site.

b Applies to any site that does not meet the definition of industrial or commercial.

c For arsenic, use the valence state most likely to be appropriate for site conditions, unless laboratory information is available. Where soil conditions alternate between saturated, anaerobic and unsaturated, aerobic states, resulting in the alternating presence of arsenic III and arsenic V, the arsenic III concentrations shall apply.

d Safe concentration has not yet been established. See WAC 173-340-7492 (2)(c).

Table 749-3

Ecological Indicator Soil Concentrations (mg/kg) for Protection of Terrestrial Plants and Animals[a]. For chemicals where a value is not provided, see footnote b.

Note: These values represent soil concentrations that are expected to be protective at any MTCA site and are provided for use in eliminating hazardous substances from further consideration under WAC 173-340-7493 (2)(a)(i). Where these values are exceeded, various options are provided for demonstrating that the hazardous substance does not pose a threat to ecological receptors at a site, or for developing site-specific remedial standards for eliminating threats to ecological receptors. See WAC 173-340-7493 (1)(b)(i), 173-340-7493 (2)(a)(ii) and 173-340-7493(3).

Hazardous Substance[b]	Plants[c]	Soil biota[d]	Wildlife[e]
METALS[f]:			
Aluminum (soluble salts)	50		
Antimony	5		
Arsenic III			7
Arsenic V	10	60	132
Barium	500		102
Beryllium	10		
Boron	0.5		
Bromine	10		
Cadmium	4	20	14
Chromium (total)	42[g]	42[g]	67
Cobalt	20		
Copper	100	50	217
Fluorine	200		
Iodine	4		
Lead	50	500	118
Lithium	35[g]		
Manganese	1,100[g]		1,500
Mercury, inorganic	0.3	0.1	5.5
Mercury, organic			0.4
Molybdenum	2		7
Nickel	30	200	980
Selenium	1	70	0.3
Silver	2		
Technetium	0.2		
Thallium	1		
Tin	50		
Uranium	5		
Vanadium	2		
Zinc	86[g]	200	360
PESTICIDES:			
Aldrin			0.1
Benzene hexachloride (including lindane)			6
Chlordane		1	2.7
DDT/DDD/DDE (total)			0.75
Dieldrin			0.07
Endrin			0.2
Hexachlorobenzene			17
Heptachlor/heptachlor epoxide (total)			0.4
Pentachlorophenol	3	6	4.5
OTHER CHLORINATED ORGANICS:			
1,2,3,4-Tetrachlorobenzene		10	
1,2,3-Trichlorobenzene		20	
1,2,4-Trichlorobenzene		20	
1,2-Dichloropropane		700	
1,4-Dichlorobenzene		20	
2,3,4,5-Tetrachlorophenol		20	
2,3,5,6-Tetrachloroaniline	20	20	
2,4,5-Trichloroaniline	20	20	
2,4,5-Trichlorophenol	4	9	
2,4,6-Trichlorophenol		10	
2,4-Dichloroaniline		100	
3,4-Dichloroaniline		20	
3,4-Dichlorophenol	20	20	
3-Chloroaniline	20	30	
3-Chlorophenol	7	10	

Chlorinated dibenzofurans (total)			2E-06
Chloroacetamide		2	
Chlorobenzene		40	
Dioxins			2E-06
Hexachlorocyclopentadiene	10		
PCB mixtures (total)	40		0.65
Pentachloroaniline		100	
Pentachlorobenzene		20	
OTHER NONCHLORINATED ORGANICS:			
2,4-Dinitrophenol	20		
4-Nitrophenol		7	
Acenaphthene	20		
Benzo(a)pyrene			12
Biphenyl	60		
Diethylphthalate	100		
Dimethylphthalate		200	
Di-n-butyl phthalate	200		
Fluorene		30	
Furan	600		
Nitrobenzene		40	
N-nitrosodiphenylamine		20	
Phenol	70	30	
Styrene	300		
Toluene	200		
PETROLEUM:			
Gasoline Range Organics		100	5,000 mg/kg except that the concentration shall not exceed residual saturation at the soil surface.
Diesel Range Organics		200	6,000 mg/kg except that the concentration shall not exceed residual saturation at the soil surface.

Footnotes:

a Caution on misusing ecological indicator concentrations. Exceedances of the values in this table do not necessarily trigger requirements for cleanup action under this chapter. Natural background concentrations may be substituted for ecological indicator concentrations provided in this table. The table is not intended for purposes such as evaluating sludges or wastes.

This list does not imply that sampling must be conducted for each of these chemicals at every site. Sampling should be conducted for those chemicals that might be present based on available information, such as current and past uses of chemicals at the site.

b For hazardous substances where a value is not provided, plant and soil biota indicator concentrations shall be based on a literature survey conducted in accordance with WAC 173-340-7493(4) and calculated using methods described in the publications listed below in footnotes c and d. Methods to be used for developing wildlife indicator concentrations are described in Tables 749-4 and 749-5.

c Based on benchmarks published in *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Terrestrial Plants: 1997 Revision*, Oak Ridge National Laboratory, 1997.

d Based on benchmarks published in *Toxicological Benchmarks for Potential Contaminants of Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process*, Oak Ridge National Laboratory, 1997.

e Calculated using the exposure model provided in Table 749-4 and chemical-specific values provided in Table 749-5. Where both avian and mammalian values are available, the wildlife value is the lower of the two.

f For arsenic, use the valence state most likely to be appropriate for site conditions, unless laboratory information is available. Where soil conditions alternate between saturated, anaerobic and unsaturated, aerobic states, resulting in the alternating presence of arsenic III and arsenic V, the arsenic III concentrations shall apply.

g Benchmark replaced by Washington state natural background concentration.

Table 749-4
Wildlife Exposure Model for Site-specific Evaluations.[a]

Plant	
K_{Plant}	Plant uptake coefficient (dry weight basis)
	Units: mg/kg plant/mg/kg soil
	Value: chemical-specific (see Table 749-5)
Soil biota Surrogate receptor: Earthworm	
BAF_{Worm}	Earthworm bioaccumulation factor (dry weight basis)
	Units: mg/kg worm/mg/kg soil
	Value: chemical-specific (see Table 749-5)
Mammalian predator Surrogate receptor: Shrew (*Sorex*)	
$P_{SB\ (shrew)}$	Proportion of contaminated food (earthworms) in shrew diet
	Units: unitless
	Value: 0.50
$FIR_{Shrew,DW}$	Food ingestion rate (dry weight basis)
	Units: kg dry food/kg body weight - day
	Value: 0.45
$SIR_{Shrew,DW}$	Soil ingestion rate (dry weight basis)
	Units: kg dry soil/kg body weight - day
	Value: 0.0045

$RGAF_{Soil, shrew}$	Gut absorption factor for a hazardous substance in soil expressed relative to the gut absorption factor for the hazardous substance in food.
	Units: unitless
	Value: chemical-specific (see Table 749-5)
T_{Shrew}	Toxicity reference value for shrew
	Units: mg/kg - day
	Value: chemical-specific (see Table 749-5)
Home range	0.1 Acres
Avian predator Surrogate receptor: American robin (*Turdus migratorius*)	
$P_{SB (Robin)}$	Proportion of contaminated food (soil biota) in robin diet
	Unit: unitless
	Value: 0.52
$FIR_{Robin,DW}$	Food ingestion rate (dry weight basis)
	Units: kg dry food/kg body weight - day
	Value: 0.207
$SIR_{Robin,DW}$	Soil ingestion rate (dry weight basis)
	Units: kg dry soil/kg body weight - day
	Value: 0.0215
$RGAF_{Soil, robin}$	Gut absorption factor for a hazardous substance in soil expressed relative to the gut absorption factor for the hazardous substance in food.
	Units: unitless
	Value: chemical-specific (see Table 749-5)
T_{Robin}	Toxicity reference value for robin
	Units: mg/kg - day
	Value: chemical-specific (see Table 749-5)
Home range	0.6 Acres
Mammalian herbivore Surrogate receptor: Vole (*Microtus*)	
$P_{Plant, vole}$	Proportion of contaminated food (plants) in vole diet
	Units: unitless
	Value: 1.0
$FIR_{Vole,DW}$	Food ingestion rate (dry weight basis)
	Units: kg dry food/kg body weight - day
	Value: 0.315
$SIR_{Vole,DW}$	Soil ingestion rate (dry weight basis)
	Units: kg dry soil/kg body weight - day
	Value: 0.0079
$RGAF_{Soil, vole}$	Gut absorption factor for a hazardous substance in soil expressed relative to the gut absorption factor for the hazardous substance in food.
	Units: unitless
	Value: chemical-specific (see Table 749-5)
T_{Vole}	Toxicity reference value for vole
	Units: mg/kg - day
	Value: chemical-specific (see Table 749-5)
Home range	0.08 Acres
Soil concentrations for wildlife protection[b]	
(1) Mammalian predator: $SC_{MP} = (T_{Shrew})/[(FIR_{Shrew,DW} \times P_{SB (shrew)} \times BAF_{Worm}) + (SIR_{Shrew,DW} \times RGAF_{Soil, shrew})]$	
(2) Avian predator: $SC_{AP} = (T_{Robin})/[(FIR_{Robin,DW} \times P_{SB (Robin)} \times BAF_{Worm}) + (SIR_{Robin,DW} \times RGAF_{Soil, robin})]$	
(3) Mammalian herbivore: $SC_{MH} = (T_{Vole})/[(FIR_{Vole,DW} \times P_{Plant, vole} \times K_{Plant}) + (SIR_{Vole,DW} \times RGAF_{Soil, vole})]$	

Footnotes:

a Substitutions for default receptors may be made as provided for in WAC 173-340-7493(7). If a substitute species is used, the values for food and soil ingestion rates, and proportion of contaminated food in the diet, may be modified to reasonable maximum exposure estimates for the substitute species based on a literature search conducted in accordance with WAC 173-340-7493(4).
Additional species may be added on a site-specific basis as provided in WAC 173-340-7493 (2)(a).
The department shall consider proposals for modifications to default values provided in this table based on new scientific information in accordance with WAC 173-340-702(14).

b Use the lowest of the three concentrations calculated as the wildlife value.

Table 749-5

Default Values for Selected Hazardous Substances for use with the Wildlife Exposure Model in Table 749-4.[a]

	Toxicity reference value (mg/kg - d)				
Hazardous Substance	**BAF_{Worm}**	**K_{Plant}**	**Shrew**	**Vole**	**Robin**
METALS:					
Arsenic III	1.16	0.06	1.89	1.15	
Arsenic V	1.16	0.06	35	35	22
Barium	0.36		43.5	33.3	
Cadmium	4.6	0.14	15	15	20
Chromium	0.49		35.2	29.6	5
Copper	0.88	0.020	44	33.6	61.7
Lead	0.69	0.0047	20	20	11.3
Manganese	0.29		624	477	
Mercury, inorganic	1.32	0.0854	2.86	2.18	0.9
Mercury, organic	1.32		0.352	0.27	0.064
Molybdenum	0.48	1.01	3.09	2.36	35.3
Nickel	0.78	0.047	175.8	134.4	107
Selenium	10.5	0.0065	0.725	0.55	1
Zinc	3.19	0.095	703.3	537.4	131
PESTICIDES:					
Aldrine	4.77	0.007[b]	2.198	1.68	0.06
Benzene hexachloride (including lindane)	10.1				7
Chlordane	17.8	0.011[b]	10.9	8.36	10.7
DDT/DDD/DDE	10.6	0.004[b]	8.79	6.72	0.87
Dieldrin	28.8	0.029[b]	0.44	0.34	4.37
Endrin	3.6	0.038[b]	1.094	0.836	0.1
Heptachlor/heptachlor epoxide	10.9	0.027[b]	2.857	2.18	0.48
Hexachlorobenzene	1.08				2.4
Pentachlorophenol	5.18	0.043[b]	5.275	4.03	
OTHER CHLORINATED ORGANICS:					
Chlorinated dibenzofurans	48				1.0E-05
Dioxins	48	0.005[b]	2.2E-05	1.7E-05	1.4E-04
PCB mixtures	4.58	0.087[b]	0.668	0.51	1.8
OTHER NONCHLORINATED ORGANICS:					
Benzo(a)pyrene	0.43	0.011	1.19	0.91	

Footnotes:

a For hazardous substances not shown in this table, use the following default values. Alternatively, use values established from a literature survey conducted in accordance with WAC 173-340-7493(4) and approved by the department.

K_{Plant}: Metals (including metalloid elements): 1.01

Organic chemicals: $K_{Plant}=10^{(1.588-(0.578\log Kow))}$,

where $\log K_{ow}$ is the logarithm of the octanol-water partition coefficient.

BAF_{Worm}: Metals (including metalloid elements): 4.6

Nonchlorinated organic chemicals:

$\log K_{ow} < 5$: 0.7

$\log K_{ow} > 5$: 0.9

Chlorinated organic chemicals:

$\log K_{ow} < 5$: 4.7

$\log K_{ow} > 5$: 11.8

$RGAF_{Soil}$ (all receptors): 1.0

Toxicity reference values (all receptors): Values established from a literature survey conducted in accordance with WAC 173-340-7493(4).

Site-specific values may be substituted for default values, as described below:

K_{Plant} Value from a literature survey conducted in accordance with WAC 173-340-7493(4) or from empirical studies at the site.

BAF_{Worm} Value from a literature survey conducted in accordance with WAC 173-340-7493(4) or from empirical studies at the site.

$RGAF_{Soil}$ (all receptors): Value established from a literature survey conducted in accordance with WAC 173-340-7493(4).

Toxicity reference values (all receptors): Default toxicity reference values provided in this table may be replaced by a value established from a literature survey conducted in accordance with WAC 173-340-7493(4).

b Calculated from $\log K_{ow}$ using formula in footnote a.

Table 830-1
Required Testing for Petroleum Releases.

	Gasoline Range Organics (GRO) (1)	Diesel Range Organics (DRO) (2)	Heavy Oils (DRO) (3)	Mineral Oils (4)	Waste Oils and Unknown Oils (5)
Volatile Petroleum Compounds					
Benzene	X (6)	X (7)			X (8)
Toluene	X (6)	X (7)			X (8)
Ethyl benzene	X (6)	X (7)			X (8)
Xylenes	X (6)	X (7)			X (8)
n-Hexane	X (9)				
Fuel Additives and Blending Compounds					
Dibromoethane, 1-2 (EDB); and Dichloroethane, 1-2 (EDC)	X (10)				X (8)
Methyl tertiary-butyl ether (MTBE)	X (11)				X (8)
Total lead &other additives	X (12)				X (8)
Other Petroleum Components					
Carcinogenic PAHs		X (13)	X (13)		X (8)
Naphthalenes	X (14)	X (14)	X (14)		X (14)
Other Compounds					
Polychlorinated Biphenyls (PCBs)			X (15)	X (15)	X (8)
Halogenated Volatile Organic Compounds (VOCs)					X (8)
Other	X (16)	X (16)	X (16)	X (16)	X (16)
Total Petroleum Hydrocarbons Methods					
TPH Analytical Method for Total TPH (Method A Cleanup Levels) (17)	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx	NWTPH-Dx	NWTPH-Gx & NWTPH-Dx
TPH Analytical Methods for TPH fractions (Methods B or C) (17)	VPH	EPH	EPH	EPH	VPH and EPH

Use of Table 830-1: An "X" in the box means that the testing requirement applies to ground water and soil if a release is known or suspected to have occurred to that medium, unless otherwise specified in the footnotes. A box with no "X" indicates (except in the last two rows) that, for the type of petroleum product release indicated in the top row, analyses for the hazardous substance(s) named in the far-left column corresponding to the empty box are not typically required as part of the testing for petroleum releases. However, such analyses may be required based on other site-specific information. Note that testing for Total Petroleum Hydrocarbons (TPH) is required for every type of petroleum release, as indicated in the bottom two rows of the table. The testing method for TPH depends on the type of petroleum product released and whether Method A or Method B or C is being used to determine TPH cleanup levels. See WAC 173-340-830 for analytical procedures. **The footnotes to this table are important for understanding the specific analytical requirements for petroleum releases.**

Footnotes:

(1) The following petroleum products are common examples of GRO: automotive and aviation gasolines, mineral spirits, stoddard solvents, and naphtha. To be in this range, 90 percent of the petroleum components need to be quantifiable using the NWTPH-Gx; if NWTPH-HCID results are used for this determination, then 90 percent of the "area under the TPH curve" must be quantifiable using NWTPH-Gx. Products such as jet fuel, diesel No. 1, kerosene, and heating oil may require analysis as both GRO and DRO depending on the range of petroleum components present (range can be measured by NWTPH-HCID). (See footnote 17 on analytical methods.)

(2) The following petroleum products are common examples of DRO: Diesel No. 2, fuel oil No. 2, light oil (including some bunker oils). To be in this range, 90 percent of the petroleum components need to be quantifiable using the NWTPH-Dx quantified against a diesel standard. Products such as jet fuel, diesel No. 1, kerosene, and heating oil may require analysis as both GRO and DRO depending on the range of petroleum components present as measured in NWTPH-HCID.

(3) The following petroleum products are common examples of the heavy oil group: Motor oils, lube oils, hydraulic fluids, etc. Heavier oils may require the addition of an appropriate oil range standard for quantification.

(4) Mineral oil means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors.

(5) The waste oil category applies to waste oil, oily wastes, and unknown petroleum products and mixtures of petroleum and nonpetroleum substances. Analysis of other chemical components (such as solvents) than those listed may be required based on site-specific information. Mixtures of identifiable petroleum products (such as gasoline and diesel, or diesel and motor oil) may be analyzed based on the presence of the individual products, and need not be treated as waste and unknown oils.

(6) When using Method A, testing soil for benzene is required. Furthermore, testing ground water for BTEX is necessary when a petroleum release to ground water is known or suspected. If the ground water is tested and toluene, ethyl benzene or xylene is in the ground water above its respective Method A cleanup level, the soil must also be tested for that chemical. When using Method B or C, testing the soil for BTEX is required and testing for BTEX in ground water is required when a release to ground water is known or suspected.

(7)(a) For DRO releases from other than home heating oil systems, follow the instructions for GRO releases in Footnote (6).

(b) For DRO releases from typical home heating oil systems (systems of 1,100 gallons or less storing heating oil for residential consumptive use on the premises where stored), testing for BTEX is not usually required for either ground water or soil. Testing of the ground water is also not usually required for these systems; however, if the ground water is tested and benzene is found in the ground water, the soil must be tested for benzene.

(8) Testing is required in a sufficient number of samples to determine whether this chemical is present at concentrations of concern. If the chemical is found to be at levels below the applicable cleanup level, then no further analysis is required.

(9) Testing for n-hexane is required when VPH analysis is performed for Method B or C. In this case, the concentration of n-hexane should be deleted from its respective fraction to avoid double-counting its concentration. n-Hexane's contribution to overall toxicity is then evaluated using its own reference dose.

(10) Volatile fuel additives (such as dibromoethane, 1 - 2 (EDB) (CAS# 106-93-4) and dichloroethane, 1 - 2 (EDC) (CAS# 107-06-2)) must be part of a volatile organics analysis (VOA) of GRO contaminated ground water. If any is found in ground water, then the contaminated soil must also be tested for these chemicals.

(11) Methyl tertiary-butyl ether (MTBE) (CAS# 1634-04-4) must be analyzed in GRO contaminated ground water. If any is found in ground water, then the contaminated soil must also be tested for MTBE.

(12)(a) For automotive gasoline where the release occurred prior to 1996 (when "leaded gasoline" was used), testing for lead is required unless it can be demonstrated that lead was not part of the release. If this demonstration cannot be made, testing is required in a sufficient number of samples to determine whether lead is present at concentrations of concern. Other additives and blending compounds of potential environmental significance may need to be considered for testing, including: tertiary-butyl alcohol (TBA); tertiary-amyl methyl ether (TAME); ethyl tertiary-butyl ether (ETBE); ethanol; and methanol. Contact the department for additional testing recommendations regarding these and other additives and blending compounds.

(b) For aviation gasoline, racing fuels and similar products, testing is required for likely fuel additives (especially lead) and likely blending compounds, no matter when the release occurred.

(13) Testing for carcinogenic PAHs is required for DRO and heavy oils, except for the following products for which adequate information exists to indicate their absence: Diesel No. 1 and 2, home heating oil, kerosene, jet fuels, and electrical insulating mineral oils. The carcinogenic PAHs include benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, benzo(k)fluoranthene, benzo(a)anthracene, and benzo(b)fluoranthene.

(14)(a) Except as noted in (b) and (c), testing for the noncarcinogenic PAHs, including the "naphthalenes" (naphthalene, 1-methylnaphthalene, and 2-methyl-naphthalene) is not required when using Method A cleanup levels, because they are included in the TPH cleanup level.

(b) Testing of soil for naphthalenes is required under Methods B and C when the inhalation exposure pathway is evaluated.

(c) If naphthalenes are found in ground water, then the soil must also be tested for naphthalenes.

(15) Testing for PCBs is required unless it can be demonstrated that: (1) the release originated from an electrical device manufactured for use in the United States after July 1, 1979; (2) oil containing PCBs was never used in the equipment suspected as the source of the release (examples of equipment where PCBs are likely to be found include transformers, electric motors, hydraulic systems, heat transfer systems, electromagnets, compressors, capacitors, switches and miscellaneous other electrical devices); or, (3) the oil released was recently tested and did not contain PCBs.

(16) Testing for other possible chemical contaminants may be required based on site-specific information.

(17) The analytical methods NWTPH-Gx, NWTPH-Dx, NWTPH-HCID, VPH, and EPH are methods published by the department of ecology and available on the department's Internet web site: http://www.ecy.wa.gov/programs/tcp/cleanup.html.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-900, filed 2/12/01, effective 8/15/01.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

Chapter 173-342 WAC
ADDITIONAL TAXABLE HAZARDOUS SUBSTANCE LIST

WAC

WAC 173-342-010 Purpose and authority. The purposes of this chapter are to establish requirements for the addition or deletion of materials to the list of hazardous substances which are subject to the state hazardous substance tax pursuant to chapter 2, Laws of 1989, and to list or delete those substances.

It is the intent of this rule to add only materials which are similar to those previously defined by the Model Toxics Control Act as taxable hazardous substances. Those are, in general terms, petroleum products, pesticide products, and chemicals. Manufactured products which may be environmentally detrimental, but not of special hazard, such as plastic containers, solid metals, and wood products or wood fibers are not of this type.

The authority to add or delete additional substances is granted under section 9, chapter 2, Laws of 1989.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-010, filed 1/9/90, effective 2/9/90.]

WAC 173-342-020 Definitions. For the purpose of this chapter, the following terms have the meanings given below:

(1) "Director" means the director of the department of ecology or the director's designee.

(2) "Hazardous substance" means anything designated as such by the provisions of this rule, as adopted and thereafter amended. In addition, this term includes:

(a) Any substance that, on March 1, 1989, is a hazardous substance under section 101(14) of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by P.L. 99-499. These substances consist of chemicals and elements in their purest form. (Reportable quantities associated with these chemicals under CERCLA are not considered for the purposes of this tax, but are duly noted here to avoid any confusion regarding

the intent of the federal regulation. See CERCLA, 42 USCA, Sec. 9601.) A CERCLA substance which contains water, a stabilizer, or a preservative is still considered pure. Combinations of CERCLA substances as ingredients together with nonhazardous substances will not be taxable unless the end product is specifically designated as a hazardous substance by the department of ecology under the provisions of this rule;

(b) Petroleum products;

(c) Pesticide products required to be registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

(3) "Material" means substance, chemicals, category of chemicals, or mixtures of chemicals including products.

(4) "Persistence" means the tendency of a substance to resist degradation and remain in the atmosphere, soil, and/or water.

(5) "Toxicity" means a measure of the propensity of a chemical to produce injury once it reaches a susceptible receptor in or on a living organism.

(6) Except for terms defined in this section, the definitions in section 9, chapter 2, Laws of 1989 and WAC 458-20-252 apply to this chapter.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-020, filed 1/9/90, effective 2/9/90.]

WAC 173-342-030 Basis to determine what is a taxable hazardous substance. Additional materials may be defined as taxable hazardous substances on the basis of a departmental determination of:

(1) Negative environmental factors such as substantial toxicity and persistence of materials being considered for listing or delisting; and

(2) Substantial adverse impact on waste management operations such as the management of hazardous waste, solid waste, wastewater treatment facilities, wastewater from ground or marine septic systems, and contaminated sites.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-030, filed 1/9/90, effective 2/9/90.]

WAC 173-342-040 Listing. The director may propose to add (or delete from those materials previously added) materials to the definition of hazardous substance.

(1) Additions or deletions to the list shall be made by amendment of this rule pursuant to the Administrative Procedure Act (chapter 34.05 RCW).

(2) The director of ecology shall add or delete materials no more than twice during each calendar year.

(3) For tax purposes, changes in this definition shall take effect on the first day of the next month that is at least thirty days after the effective date of the rule.

(4) For each material proposed for additional listing, the department shall prepare a "basis for listing" which shall include those factors and data which led the director to propose the listing.

(5) The director shall prepare a "basis for deletion" which shall include those factors and data which led the director to propose deletions from materials previously added.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-040, filed 1/9/90, effective 2/9/90.]

WAC 173-342-050 List. (Reserved.)

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-050, filed 1/9/90, effective 2/9/90.]

Chapter 173-351 WAC
CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS

WAC

WAC 173-351-010 Purpose, applicability and effective dates. (1) Purpose. The purpose of this regulation is to establish minimum statewide standards for all municipal solid waste landfill (MSWLF) units under the authority of chapter 70.95 RCW as amended in order that jurisdictional health departments can enact ordinances equally as or more stringent than this regulation and to have jurisdictional health departments implement such ordinances through a permit system set forth in Section 700. It is also the purpose of this regulation to implement rule making by the Environmental Protection Agency (EPA) under the authority of subtitle D of the Resource Conservation and Recovery Act (RCRA), as amended in 1984, and under the authority of Section 405(d) of the Clean Water Act as amended. The Clean Water Act required EPA "to establish standards for sewage sludge that is co-disposed with municipal solid waste." EPA satisfied both statutory requirements with the publication of 40 CFR Part 258-Criteria For Municipal Solid Waste Landfills on October 9, 1991. These minimum statewide criteria ensure the protection of human health and the environment.

(2) Applicability.

(a) These criteria apply to new MSWLF units, existing MSWLF units, and lateral expansions, except as otherwise specifically provided in this regulation; all other solid waste

the intent of the federal regulation. See CERCLA, 42 USCA, Sec. 9601.) A CERCLA substance which contains water, a stabilizer, or a preservative is still considered pure. Combinations of CERCLA substances as ingredients together with nonhazardous substances will not be taxable unless the end product is specifically designated as a hazardous substance by the department of ecology under the provisions of this rule;

(b) Petroleum products;

(c) Pesticide products required to be registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

(3) "Material" means substance, chemicals, category of chemicals, or mixtures of chemicals including products.

(4) "Persistence" means the tendency of a substance to resist degradation and remain in the atmosphere, soil, and/or water.

(5) "Toxicity" means a measure of the propensity of a chemical to produce injury once it reaches a susceptible receptor in or on a living organism.

(6) Except for terms defined in this section, the definitions in section 9, chapter 2, Laws of 1989 and WAC 458-20-252 apply to this chapter.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-020, filed 1/9/90, effective 2/9/90.]

WAC 173-342-030 Basis to determine what is a taxable hazardous substance. Additional materials may be defined as taxable hazardous substances on the basis of a departmental determination of:

(1) Negative environmental factors such as substantial toxicity and persistence of materials being considered for listing or delisting; and

(2) Substantial adverse impact on waste management operations such as the management of hazardous waste, solid waste, wastewater treatment facilities, wastewater from ground or marine septic systems, and contaminated sites.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-030, filed 1/9/90, effective 2/9/90.]

WAC 173-342-040 Listing. The director may propose to add (or delete from those materials previously added) materials to the definition of hazardous substance.

(1) Additions or deletions to the list shall be made by amendment of this rule pursuant to the Administrative Procedure Act (chapter 34.05 RCW).

(2) The director of ecology shall add or delete materials no more than twice during each calendar year.

(3) For tax purposes, changes in this definition shall take effect on the first day of the next month that is at least thirty days after the effective date of the rule.

(4) For each material proposed for additional listing, the department shall prepare a "basis for listing" which shall include those factors and data which led the director to propose the listing.

(5) The director shall prepare a "basis for deletion" which shall include those factors and data which led the director to propose deletions from materials previously added.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-040, filed 1/9/90, effective 2/9/90.]

WAC 173-342-050 List. (Reserved.)

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-050, filed 1/9/90, effective 2/9/90.]

Chapter 173-351 WAC
CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS

WAC

WAC 173-351-010 Purpose, applicability and effective dates. (1) Purpose. The purpose of this regulation is to establish minimum statewide standards for all municipal solid waste landfill (MSWLF) units under the authority of chapter 70.95 RCW as amended in order that jurisdictional health departments can enact ordinances equally as or more stringent than this regulation and to have jurisdictional health departments implement such ordinances through a permit system set forth in Section 700. It is also the purpose of this regulation to implement rule making by the Environmental Protection Agency (EPA) under the authority of subtitle D of the Resource Conservation and Recovery Act (RCRA), as amended in 1984, and under the authority of Section 405(d) of the Clean Water Act as amended. The Clean Water Act required EPA "to establish standards for sewage sludge that is co-disposed with municipal solid waste." EPA satisfied both statutory requirements with the publication of 40 CFR Part 258-Criteria For Municipal Solid Waste Landfills on October 9, 1991. These minimum statewide criteria ensure the protection of human health and the environment.

(2) Applicability.

(a) These criteria apply to new MSWLF units, existing MSWLF units, and lateral expansions, except as otherwise specifically provided in this regulation; all other solid waste

disposal facilities and practices that are not regulated under subtitle C of RCRA and chapter 70.105 RCW are subject to the criteria contained in 40 CFR Part 257, Criteria For Classification of Solid Waste Disposal Facilities, and/or chapter 173-304 WAC as amended.

Note: These rules do not apply to facilities that receive only inert and demolition waste, wood waste, industrial solid wastes, or other types of solid waste (other than household waste) disposed of in limited purpose landfills regulated in chapter 173-304 WAC, minimum functional standards for solid waste handling. Co-disposal of any solid waste with household waste is governed by these rules.

(b) These criteria do not apply to MSWLF units that do not receive waste on or after the effective date of this chapter. MSWLF units that stopped receiving waste prior to October 9, 1991, are subject to closure and post-closure rules under chapter 173-304 WAC, the Minimum Functional Standards for Solid Waste Handling. MSWLF units that received waste on and after October 9, 1991, but stop receiving waste prior to the effective date of this rule:

(i) Are also subject to federal closure rules under 40 CFR Part 258.60(a);

(ii) Will be subject to all the requirements of this regulation unless otherwise specified, if such MSWLF units fail to meet the federal closure rules under 40 CFR Part 258.60(a) by April 9, 1994, and the closure standards of chapter 173-304 WAC; except that jurisdictional health departments may grant time extensions to complete closure under 40 CFR Part 258.60(a) by October 9, 1994; and

(iii) Will be subject to the ground water monitoring and corrective action requirements of WAC 173-351-400 and the permitting requirements of WAC 173-351-700 if such MSWLF units are part of a multi-unit ground water monitoring system of WAC 173-351-450(4).

(c) All MSWLF units that receive waste on or after the effective date of this chapter must comply with this chapter by the effective date of this chapter unless:

(i) Later effective dates are specified elsewhere in this chapter, such as WAC 173-351-400 (1)(b), ground water monitoring and WAC 173-351-600 (4)(c); or

(ii) The MSWLF unit is an existing MSWLF unit or an existing lateral expansion of an existing unit that:

(A) Disposed of 100 tons per day or less of solid waste during a representative period prior to the effective date of this chapter;

(B) Does not dispose of more than an average of 100 tons per day of solid waste each month between the effective date of this chapter and April 9, 1994; and

(C) Is not on the National Priorities List (NPL) as found in Appendix B to 40 CFR Part 300.

(d) MSWLF units that meet conditions of (c) of this subsection are exempt from all requirements of this rule but must meet the final cover requirement specified in 40 CFR 258.60(a) and the requirements of chapter 173-304 WAC. The final cover must be installed by October 9, 1994. Owners or operators of MSWLF units described in (c) and (d) of this section that fail to complete cover installation by October 9, 1994, will be subject to all requirements of this chapter, unless otherwise specified.

(e) MSWLF units failing to satisfy these criteria are considered open dumps for purposes of state solid waste management planning under RCRA.

(f) MSWLF units failing to satisfy these criteria constitute open dumps, which are prohibited under section 4005 of RCRA.

(g) MSWLF units containing sewage sludge and failing to satisfy these criteria violate Sections 309 and 405(e) of the Federal Clean Water Act.

Note: All state codes standards, rules and regulations cited in this chapter are available by writing to the Department of Ecology, P.O. Box 4-7600, Olympia, Washington 98504-7600, or call 1-800-RECYCLE for the location of the nearest regional office of the department.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-010, filed 10/26/93, effective 11/26/93.]

WAC 173-351-100 Definitions. Unless otherwise noted, all terms contained in this part are defined by their plain meaning. This section contains definitions for terms that appear throughout this regulation; additional definitions appear in the specific sections to which they apply.

"Active area" means that part of a facility that includes the active portion and portions of a facility that recycle, store, treat, or dispose of solid (including liquid) wastes. The active area includes leachate treatment facilities and runoff ponds. It excludes run-on ponds and on-site roads which are used for any purpose; on-site roads are considered part of the buffer zone. See active portion and buffer zone definition below.

"Active life" means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities in accordance with WAC 173-351-500, Closure and post-closure care.

"Active portion" means that part of a facility or MSWLF unit that has received or is receiving wastes and that has not been closed in accordance with WAC 173-351-500, Closure and post-closure care.

"Airport." See WAC 173-351-130 (2)(d)(i).

"Areas susceptible to mass movement." See WAC 173-351-130 (7)(b)(iv).

"Arid" means locations in the state of Washington having less than twelve inches (30 centimeters) of precipitation annually.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all requirements under chapter 70.95J RCW. Biosolids includes septic tank sludge, also known as septage, that can be beneficially recycled and meets all requirements of chapter 70.95J RCW.

"Bird hazard." See WAC 173-351-130 (2)(d)(ii).

"Buffer zone" means that part of a facility which lies between the active area and the property boundary.

"Closure" means those actions taken by the owner or operator of a MSWLF unit or facility to cease disposal operations and to ensure that a MSWLF unit or facility is closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period. Closure is considered part of operation. See definition of operation.

"Commercial solid waste" means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

"Composite layer." See WAC 173-351-500 (1)(i)(B).

"Composite liner." See WAC 173-351-300 (2)(a)(ii).

"Construction quality assurance" means a planned system of activities that provide assurance that a facility is constructed as specified in the design and that the materials used in construction are manufactured according to specifications. Construction quality assurance includes inspections, verifications, audits, and evaluations of materials and workmanship necessary to determine and document the quality of the constructed facility.

"Construction quality control" means a planned system of activities that is used to directly monitor and control the quality of a construction project. Construction quality controls are the measures under taken by the contractor or installer to determine compliance with requirements for workmanship and materials put forth in the plans and specification for the construction project.

"Contaminate" means to allow to discharge a substance into ground water that would cause:

The concentration of that substance in the ground water to exceed the maximum contamination level specified in chapter 173-200 WAC; or

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 chapter 173-200 WAC; or

A statistically significant increase above background in the concentration of a substance which:

Is not specified in chapter 173-200 WAC; and

Is present in the solid waste; and

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 health.

"Dangerous wastes" means any solid waste designated as dangerous waste under chapter 173-303 WAC, the Dangerous waste regulations.

"Demolition waste" means solid waste, largely inert waste resulting from the demolition or razing of buildings, roads and other man-made structures.

"Demonstration" means a showing by the owner or operator that human health and the environment can be protected as equally as a given requirement in the regulation. A demonstration is made in the application for a permit under WAC 173-351-700. A successful demonstration allows or authorizes an activity authorized for the life of the facility unless an alternative time period is approved by the jurisdictional health department.

"Department" means the department of ecology.

"Disease vectors." See WAC 173-351-200 (3)(b).

"Displacement." See WAC 173-351-130 (5)(b)(ii).

"Disposal" or "deposition" means the discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water.

"Establish" means to construct a new or laterally expanded MSWLF unit.

"Existing MSWLF unit" means any municipal solid waste landfill unit that is receiving solid waste as of the appropriate dates specified in WAC 173-351-010 (2)(c). Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good waste management practices, including operating plans approved under chapter 173-304 WAC. For the purposes of this rule, any existing horizontal expansion approved by the jurisdictional health department for which as-built plans documenting construction prior to the effective date of this chapter, have been prepared and submitted to the jurisdictional health department shall be considered an existing MSWLF unit.

"Fault." See WAC 173-351-130 (5)(b)(i).

"Facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

"Floodplain." See WAC 173-351-130 (3)(b)(i).

"Free liquids." See WAC 173-351-200(9).

"Gas condensate." See WAC 173-351-200 (9)(c)(ii).

"Ground water" means water below the land surface in a zone of saturation.

"Holocene." See WAC 173-351-130 (5)(b)(iii).

"Household waste" means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including household hazardous waste) (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). This term does not include commercial, industrial, inert and demolition waste, or wood waste.

Note: Sanitary waste in septic tanks that is not disposed of in a MSWLF unit is subject to other state and federal rules.

"Hydrostratigraphic unit" means any water-bearing geologic unit or units hydraulically connected or grouped together on the basis of similar hydraulic conductivity which can be reasonably monitored; several geologic formations or part of a geologic formation may be grouped into a single hydrostratigraphic unit; perched sand lenses may be considered a hydrostratigraphic unit or part of a hydrostratigraphic unit, for example.

Note: 'Hydraulically connected' denotes water-bearing units which can transmit water to other transmissive units.

"Inert waste" 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 rain water.

"Industrial solid wastes" means solid waste or waste byproducts generated by manufacturing or industrial processes such as scraps, trimmings, packing, pallets, and other discarded materials not otherwise designated as dangerous waste under chapter 173-303 WAC, the Dangerous waste regulations. This term does not include commercial, inert, demolition, construction, woodwaste, mining waste, or oil and gas waste but does include lunch room, office, or other

similar waste generated by employees at the industrial facility.

"Jurisdictional health department" means city, county, city-county, or district public health department as defined in chapters 70.05, 70.08, and 70.46 RCW.

"Landfill." See "Facility."

"Lateral expansion" means a horizontal expansion of the waste boundaries of an existing MSWLF unit that is not an existing horizontal expansion. (See also definition of "existing MSWLF unit.")

"Leachate" means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

"Lithified earth material." See WAC 173-351-200 (6)(b)(iii).

"Liquid waste." See WAC 173-351-200 (9)(c)(i).

"Lower explosive limit." See WAC 173-351-200 (4)(d).

"Maximum horizontal acceleration in lithified earth material." See WAC 173-351-200 (6)(b)(ii).

"Modification" means a substantial change in the design or operational plans including removal of a design element of a MSWLF unit previously set forth in a permit application or a disposal or processing activity that is not approved in the permit. To be considered a substantial change, a modification must be reasonably related to a specific requirement of this rule. Lateral expansions, a fifty percent increase or greater in design volume capacity or changes resulting in significant adverse environmental impacts that have lead a responsible official to issue a declaration of significance under WAC 197-11-736 shall not be considered a modification but would require permit reissuance under these rules.

"Municipal sewage sludge" means a semisolid substance consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from a publicly owned wastewater treatment plant. For the purposes of this rule sewage sludge generated from publicly owned leachate waste treatment works that receive sewage from on-site sanitary facilities shall not be considered to be municipal sewage sludge.

"Municipal solid waste landfill unit (MSWLF unit)" means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under chapter 173-304 WAC, the Minimum functional standards for solid waste handling or chapter 173-218 WAC, Underground injection control program. A MSWLF unit also may receive other types of RCRA subtitle D wastes, such as commercial solid waste, nonhazardous sludge, conditionally-exempt small quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion.

"New MSWLF unit" means any municipal solid waste landfill unit that has not received waste prior to the effective date of this regulation.

"Nonarid" means locations in the state of Washington having equal to or more than twelve inches (30 centimeters) of precipitation annually.

"Nuisance" means 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 other persons insecure in life, or in the use of property.

"100-year flood." See WAC 173-351-130 (3)(b)(ii).

"Open burning" means the combustion of solid waste without:

Control of combustion air to maintain adequate temperature for efficient combustion;

Containment of the combustion reaction in an enclosed device so as to provide sufficient residence time and mixing for complete combustion; and

Control of the emission of the combustion products.

"Operator" means the person(s) responsible for the overall operation of a facility or part of a facility.

"Operation" means those actions taken by an owner or operator of a facility or MSWLF unit beginning with waste acceptance at a facility or MSWLF unit up to and including closure of the facility or MSWLF unit.

"Owner" means the person(s) who owns a facility or part of a facility.

"Point of compliance" means the point located on land owned by the owner of the MSWLF unit, and is no more than one hundred fifty meters (four hundred ninety-two feet) from the waste management unit boundary; see also WAC 173-351-300 (2)(c).

"Poor foundation conditions." See WAC 173-351-130 (7)(b)(ii).

"Post-closure" means those actions taken by an owner or operator of a facility or MSWLF unit after closure.

"Purchase" means execution of a long term lease, securing of options to purchase or execution of agreements to purchase.

"Qualified ground-water scientist." See WAC 173-351-400(2).

"Random inspection." See WAC 173-351-200 (1)(b)(ii).

"Regulated dangerous waste." See WAC 173-351-200 (1)(b)(i).

"Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

"Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

"Saturated zone" means that part of the earth's crust in which all voids are filled with water.

"Seismic impact zone." See WAC 173-351-130 (6)(b)(i).

"Sewage sludge" means a semisolid substance consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from a wastewater treatment system, that does not meet the requirements of chapter 70.95J RCW.

"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 exclusive of the treated effluent from a wastewater treatment plant.

"Sole source aquifer." See WAC 173-351-140 (1)(b)(vii).

"Solid waste" means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to garbage, rubbish, ashes, industrial wastes, commercial waste, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, discarded commodities and recyclable materials.

"Structural components." See WAC 173-351-130 (7)(b)(ii).

"Unstable area." See WAC 173-351-130 (7)(b)(i).

"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, and the formation occurs above the zone of saturation.

"Vulnerability." See WAC 173-351-140 (1)(b).

"Waste management unit" means a MSWLF unit.

"Waste management unit boundary" means a vertical surface located at the hydraulically down gradient limit of the unit. This vertical surface extends down into the hydrostratigraphic unit(s) identified in the hydrogeologic report.

"Waters of the state" means lakes, rivers, ponds, streams, inland waters, underground waters, salt water, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

"Wetlands." See WAC 173-351-130 (4)(b).

"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.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-100, filed 10/26/93, effective 11/26/93.]

WAC 173-351-120 Consideration of other local, state, and federal laws. The owner or operator of a municipal solid waste landfill unit must comply with any other applicable federal, state, and local rules, laws, regulations, or other requirements.

Note: Except for 40 CFR Part 258.60(f) and 258.60(g) set forth in WAC 173-351-010 (2)(b)(ii), 40 CFR Part 258 is not an applicable federal rule for purposes of this section.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-120, filed 10/26/93, effective 11/26/93.]

WAC 173-351-130 Location restrictions. (1) Applicability.

(a) On and after the effective date of this chapter, all MSWLF units shall meet the locational restrictions of this section unless otherwise specified.

(b) Existing MSWLF units that cannot make the demonstration specified in subsection (2)(a) of this section, pertaining to airports, subsection (3)(a) of this section, pertaining to floodplains, subsection (7)(a) of this section, pertaining to unstable areas, must close by October 9, 1996, and conduct post-closure in accordance with WAC 173-351-500, Closure and post-closure care.

(c) The deadline for closure required by (b) of this subsection may be extended up to two years if the owner or operator demonstrates to the jurisdictional health department during the permitting process of WAC 173-351-700 that:

(i) There is no available alternative disposal capacity; and

(ii) There is no immediate threat to human health and the environment.

Note: Owners or operators of MSWLFs should be aware that the state department of health has adopted a state wellhead protection program in accordance with section 1428 of the Safe Drinking Water Act. Owners and operators should also be aware of locational restrictions which may exist through the process of designating and implementing Ground Water Management Areas, under chapter 173-100 WAC, and through the Special Protection Areas of chapter 173-200 WAC.

(2) Airport safety.

(a) Owners or operators of new MSWLF units, existing MSWLF units, and/or lateral expansions that are located within ten thousand feet (three thousand forty-eight meters) of any airport runway end used by turbojet aircraft or within five thousand feet (one thousand twenty-four meters) of any airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF unit does not pose a bird hazard to aircraft.

(b) Owners or operators proposing to site new MSWLF units and/or lateral expansions within a five-mile (eight kilometer) radius of any airport runway end used by turbojet or piston-type aircraft must notify the effected airport and the Federal Aviation Administration (FAA).

(c) The owner or operator must place the demonstration required by (a) of this subsection in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department.

(d) For purposes of this subsection:

(i) "Airport" means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(ii) "Bird hazard" means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

(3) Floodplains.

(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in 100-year floodplains must demonstrate that the unit will not restrict the flow of the 100-year 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 health and the environment. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department.

(b) For purposes of this subsection:

(i) "Floodplain" means the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.

(ii) "100-year flood" or "base flood" means a flood that has a one-percent or less chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in one hundred years on the average over a significantly long period.

(iii) "Washout" means the carrying away of solid waste by waters of the base flood.

(4) Wetlands.

(a) New MSWLF units and lateral expansions shall not be located in wetlands, unless the owner or operator can make the following demonstrations during the permit process of WAC 173-351-700:

(i) The construction and operation of the MSWLF unit will not:

(A) Cause or contribute to violations of chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington and chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington;

(B) Violate any applicable toxic effluent standard or prohibition under Section 307 of the Federal Clean Water Act or chapter 173-220 WAC, the National Pollutant discharge elimination system permit program;

(C) Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Federal Endangered Species Act of 1973; and

(D) Violate any requirement under the Federal Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary;

(ii) The MSWLF unit will not cause or contribute to significant degradation of wetlands. The owner or operator must demonstrate during the permit process of WAC 173-351-700 the integrity of the MSWLF unit and its ability to protect ecological resources by addressing the following factors:

(A) Erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the MSWLF unit;

(B) Erosion, stability, and migration potential of dredged and fill materials used to support the MSWLF unit;

(C) The volume and chemical nature of the waste managed in the MSWLF unit;

(D) Impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(E) The potential effects of catastrophic release of solid waste to the wetland and the resulting impacts on the environment; and

(F) Any additional factors, as necessary, to demonstrate during the permit process of WAC 173-351-700 that ecological resources in the wetland are sufficiently protected.

(iii) Where applicable under Section 404 of the Federal Clean Water Act or applicable state wetlands laws and regulations (e.g. chapter 173-22 WAC, Adoption of designations of wetlands associated with shorelines of the state), the presumption that a practicable alternative to the proposed landfill is available which does not involve wetlands is clearly rebutted;

(iv) To the extent required under Section 404 of the Federal Clean Water Act steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by:

(A) Avoiding impacts to wetlands to the maximum extent practicable as required by (a)(iii) of this subsection;

(B) Minimizing unavoidable impacts to the maximum extent practicable; and

(C) Finally offsetting remaining unavoidable wetlands impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration and maintenance of existing degraded wetlands or creation of man-made wetlands);

(v) Sufficient information is available to make a reasonable determination with respect to these demonstrations.

(b) For purposes of this subsection, "wetlands" means those areas that are defined in 40 CFR 232.2(r): Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include, but are not limited to, swamps, marshes, bogs, and similar areas.

(5) Fault areas.

(a) New MSWLF units and lateral expansions shall not be located within two hundred feet (sixty meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates during the permit process of WAC 173-351-700 that an alternative setback distance of less than two hundred feet (sixty meters) will prevent damage to the structural integrity of the MSWLF unit and will be protective of human health and the environment.

(b) For the purposes of this subsection:

(i) "Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

(ii) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(iii) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.

(6) Seismic impact zones.

(a) New MSWLF units and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates during the permit process of WAC 173-351-700 to the jurisdictional health department that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department.

(b) For the purposes of this subsection:

(i) "Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in two hundred fifty years.

(ii) "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a ninety percent or greater probability that the acceleration will not be exceeded in two hundred fifty years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

(iii) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials,

such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

(7) Unstable areas.

(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in an unstable area must demonstrate that engineering measures have been incorporated into the MSWLF unit's design to ensure that the integrity of the structural components of the MSWLF units will not be disrupted. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department. The owner or operator must consider the following factors, at a minimum, when determining whether an area is unstable:

(i) On-site or local soil conditions that may result in significant differential settling;

(ii) On-site or local geologic or geomorphologic features; and

(iii) On-site or local human-made features or events (both surface and subsurface).

(b) For purposes of this subsection:

(i) "Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, and areas susceptible to mass movements.

(ii) "Structural components" means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment.

(iii) "Poor foundation conditions" means those areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of a MSWLF unit.

(iv) "Areas susceptible to mass movement" means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the MSWLF unit, because of natural or human-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluction, block sliding, and rock fall.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-130, filed 10/26/93, effective 11/26/93.]

WAC 173-351-140 Other location restrictions. (1) Ground water.

(a) Liner separation. No new MSWLF unit or lateral expansion shall be located at a site where the bottom of the lowest liner is any less than ten feet (three meters) above the seasonal high level of ground water in any water bearing unit which is horizontally and vertically extensive, hydraulically recharged and volumetrically significant as to harm or endanger the integrity of the liner at any time, unless a demonstration during the permit process of WAC 173-351-700 can be made that a hydraulic gradient control system or the equivalent can be installed to control ground water fluctuations and maintain a five foot (1.5 meter) separation between the controlled seasonal high level of ground water in the identified water-bearing unit and the bottom of the lowest liner. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department. This demonstration must include:

(i) A hydrogeologic report required in WAC 173-351-490 including a discussion showing the effects from subsoil settlement, changes in surrounding land uses affecting ground water levels, liner leakage or other impacts will not bring any hydrostratigraphic unit to within five feet (1.5 meters) of the bottom of the lowest liner during the active life, closure and post-closure of the MSWLF unit;

(ii) Any currently available ground/surface water quality data for aquifers, springs, or streams in direct hydrologic contact with landfill's active area;

(iii) A showing that any gradient-control discharges to ground water will not adversely impact existing ground water/surface water users or the instream flow of surface waters in direct hydrologic contact or continuity with the landfill's hydraulic gradient control system;

(iv) Conceptual engineering drawings of the proposed MSWLF unit and discussion as to how the hydraulic gradient control system will not affect the structural integrity nor performance of the liner;

(v) Design specifications for the proposed ground and surface water monitoring systems; and

(vi) Preliminary engineering drawings of the hydraulic gradient control system (if applicable).

(b) Sole source aquifers. No new MSWLF unit or lateral expansion shall be located over a designated sole source aquifer unless the owner or operator can demonstrate during the permit process of WAC 173-351-700 that the sole source aquifer is not vulnerable to potential ground water contamination from the active area. Vulnerability is defined as the propensity or likelihood of a sole source aquifer to become contaminated should the integrity of the engineering control (including liners) fail; it is a measure of the propensity to deteriorate the water quality of a sole source aquifer, and takes into account an assessment of the physical barriers, the physical movement of contaminants, the hydraulic properties of the subsurface lithology; the rate of a contaminant plume movement; the physical and chemical characteristics of contaminants; and it also includes an assessment of the likelihood and ease for contaminant removal or clean-up, or the arrest of contamination, so as to not impact any further portion of the designated sole source aquifer. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department. Such a vulnerability demonstration must include the submission of a hydrogeologic report as required in WAC 173-351-490 and additionally must meet the following performance criteria:

(i) Demonstrates the presence of confining units or other lithology that will prevent the migration of ground water contamination;

(ii) Addresses the fate and transport of contaminants, including interactions in the lithologic framework, hydrogeochemical facies, contaminant travel times;

(iii) Defines and summarizes the ground water budgets for the active area and the sole source aquifer including recharge and discharge areas and includes flow net diagrams;

(iv) Provides a contingency and ground water assessment plan for the immediate arrest of any ground water contamination and steps to assess the extent of contamination;

(v) Design specifications for the proposed ground and surface water monitoring systems;

(vi) Is prepared by a hydrogeologist or other professional ground water scientist in accordance with WAC 173-351-400(2); and

(vii) "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).

(c) Drinking water supply wells. No new MSWLF unit or lateral expansion active area shall be located closer than one thousand feet (three hundred meters) to any drinking water supply well, in use and existing at the time of the purchase of the property containing the active area unless the owner or operator can demonstrate during the permit process of WAC 173-351-700 that the active area is no less than a ninety-day hydraulic travel time to the nearest down-gradient drinking water supply well in the first useable aquifer. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department. Such a demonstration must include:

(i) A hydrogeologic report required in WAC 173-351-490; and the necessary calculations for showing compliance with the ninety-day travel time; the ninety-day travel time shall be based on the peak or full pumping capacity of installed nearby wells and include potentiometric surface maps showing well capture zones and radius of influence;

(ii) Any currently available ground/surface water quality data for aquifers, springs, or streams in direct hydrologic contact with landfill's active area;

(iii) The waste management unit boundaries at facility closure;

(iv) Design specifications for the proposed ground and surface water monitoring systems; and

(v) A statement that the demonstration has been prepared by a hydrogeologist or qualified ground water scientist in accordance with 173-351-400(2).

(2) Surface water. No new MSWLF unit or lateral expansion active area shall be located within two hundred feet (sixty-one meters) measured horizontally from the ordinary high water mark, of a shoreline of the state as defined in RCW 90.58.030 (which includes some wetlands associated with waters of the state), nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 246-290-450.

See also wetlands in WAC 173-351-130(4). Local wetlands protection ordinances should be consulted to determine if greater setbacks are required.

(3) Land use. No new MSWLF unit or lateral expansion shall be located:

(a) In areas designated by the United States Fish and Wildlife Service or the department of wildlife as critical habitat for endangered or threatened species of plants, fish, or wildlife;

(b) So that the active area is any closer than one hundred feet (thirty meters) to the facility property line for land zoned as nonresidential or for unzoned lands, except that the active area shall be no closer than two hundred fifty feet (seventy-six meters) to the property line of adjacent land zoned as residential, existing at the time of the purchase of the property containing the active area.

(c) So as to be at variance with any locally-adopted land use plan or zoning requirement unless otherwise provided by local law or ordinance; and

(d) So that the active area is any closer than one thousand feet (three hundred meters) to any state or national park.

(4) Toxic air emissions. See WAC 173-351-200 (5)(a).

(5) Cover material. See WAC 173-351-200 (2)(a).

(6) Capacity. See WAC 173-351-010 (2)(c).

(7) Climatic factors. See WAC 173-351-300 (2)(b) for climatic factors.

(8) Natural soils. See WAC 173-351-300(2) for soil liner standards.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-140, filed 10/26/93, effective 11/26/93.]

WAC 173-351-200 Operating criteria. (1) Procedures for excluding the receipt of dangerous waste.

(a) Owners or operators of all MSWLF units must implement a program at the facility for detecting and preventing the disposal of regulated dangerous wastes including polychlorinated biphenyls (PCB) waste as defined in chapter 173-303 WAC, the Dangerous waste regulations. This program must include, at a minimum:

(i) Random inspections of incoming loads unless the owner or operator takes other steps (for example, instituting source controls and restricting the type of waste received) to ensure that incoming loads do not contain regulated dangerous waste or PCB wastes;

(ii) Records of any inspections;

(iii) Training of facility personnel to recognize regulated dangerous waste and PCB wastes; and

(iv) Immediate notification of the department and the jurisdictional health department if a regulated dangerous waste or PCB waste is discovered at the facility.

(b) For purposes of this subsection:

(i) "Regulated dangerous waste" means a solid waste that is a dangerous waste as defined in WAC 173-303-070, Designation of dangerous waste, including asbestos not managed in accordance to 40 CFR Part 61, that is not excluded from regulation as a dangerous waste under WAC 173-303-071 or was not generated by an exempted small quantity generator as defined in WAC 173-303-070; and

(ii) "Random inspection" means:

(A) Discharging a random waste load onto a suitable surface. A suitable surface shall be chosen to avoid interference with operations so that sorted waste can be distinguished from other loads of uninspected waste, so as to avoid litter and to contain runoff;

(B) Viewing the contents prior to actual disposal of the waste; and

(C) Allowing the facility owner or operator to return excluded wastes to the hauler, arrange for disposal of excluded wastes at a facility permitted to manage dangerous waste, or take other measures to prevent disposal of the excluded wastes at the facility.

(2) Cover material requirements.

(a) Except as provided in (b) of this subsection, the owners or operators of all MSWLF units must cover disposed solid waste with six inches (fifteen centimeters) of earthen material, i.e., soils, at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.

(b) Alternative materials of an alternative thickness other than at least six inches (15 centimeters) of earthen material may be approved by the jurisdictional health department if the owner or operator demonstrates during the permit process of WAC 173-351-700 that the alternative material and thickness control disease vectors, fires, odors, blowing litter, provides adequate access for heavy vehicles, will not adversely affect gas or leachate composition and controls and scavenging without presenting a threat to human health and the environment.

(c) The jurisdictional health department may grant a temporary waiver not to exceed three months from the requirement of (a) and (b) of this subsection if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical.

(3) Disease vector control.

(a) Owners or operators of all MSWLF units must prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment.

(b) For purposes of this subsection, "disease vectors" means any rodents, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans.

(4) Explosive gases control.

(a) Owners or operators of all MSWLF units must ensure that:

(i) The concentration of methane gas generated by the facility does not exceed twenty-five percent of the lower explosive limit for methane in facility structures (excluding gas control or recovery system components);

(ii) The concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary or beyond; and

(iii) The concentration of methane gases does not exceed one hundred parts per million by volume of methane in off-site structures.

(b) Owners or operators of all MSWLF units must implement a routine methane monitoring program to ensure that the standards of (a)(i) and (ii) of this subsection are met.

(i) The type and frequency of monitoring must be determined based on the following factors:

(A) Soil conditions;

(B) The hydrogeologic conditions surrounding the facility;

(C) The hydraulic conditions surrounding the facility; and

(D) The location of facility structures and property boundaries.

(ii) The minimum frequency of monitoring shall be quarterly.

Note: All gas monitoring wells shall be constructed and decommissioned to ensure protection of the ground water and to prevent ground water contamination and follow the requirements of chapter 173-160 WAC, Minimum standards for construction and maintenance of wells, unless otherwise approved by the jurisdictional health department.

(c) If methane gas levels exceeding the limits specified in subsection (4)(a)(i) or (ii) of this section are detected, the owner or operator must:

(i) Immediately take all necessary steps to ensure protection of human health including:

(A) Notifying the jurisdictional health department;

(B) Where subsection (4)(a)(ii) of this section is exceeded, monitoring of off-site structures for compliance with subsection (4)(a)(iii) of this section;

(C) Daily monitoring of methane gas levels unless otherwise authorized by the jurisdictional health department; and

(D) Evacuation of buildings affected by landfill gas shall be determined by the jurisdictional health department and fire department.

(ii) Within seven calendar days of detection, place in the operating record, the methane gas levels detected and a description of the steps taken to protect human health; and

(iii) Within sixty days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, and notify the jurisdictional health department that the plan has been implemented. The plan shall describe the nature and extent of the problem and the remedy.

(iv) The jurisdictional health department may establish alternative schedules for demonstrating compliance with (c)(ii) and (iii) of this subsection.

(d) For purposes of this subsection, "lower explosive limit" means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at twenty-five degrees C and atmospheric pressure.

(5) Air criteria.

(a) Owners or operators of all MSWLF units must ensure that the units not violate any applicable requirements developed under the Washington state implementation plan approved or promulgated by the Federal Environmental Protection Agency pursuant to Section 110 of the Federal Clean Air Act, as amended.

(b) Open burning of solid waste is prohibited at all MSWLF units, except: For the infrequent burning of agricultural wastes, silvicultural wastes, landclearing debris, diseased trees or debris from emergency cleanup operations, provided that such open burning is not inconsistent with policies, regulations, and permits administered by the jurisdictional air pollution control agency or the department under the Washington Clean Air Act, chapter 70.94 RCW. Household waste shall not be open burned.

(6) Access requirements. Owners or operators of all MSWLF units must control public access and prevent unauthorized vehicular traffic, illegal dumping of wastes, and controls to keep animals out by using artificial barriers, natural barriers, or both, as appropriate to protect human health and

the environment. A lockable gate shall be required at each entry to the facility.

(7) Run-on/run-off control systems.

(a) Owners or operators of all MSWLF units must design, construct, and maintain:

(i) A run-on control system to prevent flow onto the active portion of the landfill during the peak discharge from a twenty-five year storm;

(ii) A run-off control system from the active portion of the landfill to collect and control at least the water volume resulting from a twenty-four hour, twenty-five year storm.

(b) Run-off from the active portion of the landfill unit must be handled in accordance with WAC 173-351-200(8).

(8) Surface water requirements. MSWLF units shall not:

(a) Cause a discharge of pollutants into waters of the state, including wetlands, that violates any requirements of chapter 90.48 RCW, Water pollution control, including, but not limited to, chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington, chapter 173-220 RCW, the National pollutant discharge elimination system permit program and chapter 173-216 WAC, State waste discharge permit program.

(b) Cause the discharge of a nonpoint source of pollution to waters of the state, including wetlands, that violates any requirement of an area-wide or statewide water quality management plan that has been approved under Section 208 or 319 of the Federal Clean Water Act, as amended.

(9) Liquids restrictions.

(a) Bulk or noncontainerized liquid waste may not be placed in MSWLF units unless:

(i) The waste is household waste other than septic waste; or

(ii) The waste is leachate or gas condensate derived from the MSWLF unit, or water added in a controlled fashion and necessary for enhancing decomposition of solid waste, as approved during the permitting process of WAC 173-351-700, whether it is a new or existing MSWLF, or lateral expansion and the MSWLF unit:

(A) Is designed with a leachate collection system and composite liner as described in WAC 173-351-300 (2)(a)(i) and (ii) or (iii); and

(B) Is accepting leachate, condensate or water resulting from an emergency in disposing of such liquids.

The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department.

Note: Condensate and leachate are subject to designation to determine whether either is a dangerous waste under chapter 173-303 WAC.

(b) Containers holding liquid waste may not be placed in a MSWLF unit unless:

(i) The container is a small container similar in size to that normally found in household waste;

(ii) The container is designed to hold liquids for use other than storage; or

(iii) The waste is household waste.

(c) For purposes of this subsection:

(i) "Liquid waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," SW-846.

(ii) "Gas condensate" means the liquid generated as a result of gas recovery processes at the MSWLF unit.

(10) Recordkeeping requirements.

(a) The owner or operator of a MSWLF unit must record and retain the required information as it becomes available. The operating record must be retained at or near the facility in an operating record or in an alternative location approved by the jurisdictional health department during the permitting process of WAC 173-351-700. The required information includes:

(i) Copies of all initial, renewal, reissued and modified permit applications including all demonstrations, and issued permits;

(ii) Inspection records, training procedures, and notification procedures required in subsection (1) of this section, Procedures for excluding the receipt of hazardous waste, and inspection documents associated with the plan of operation, WAC 173-351-210 (1)(b).

(iii) Gas monitoring results from monitoring and any remediation plans required by WAC 173-351-200(4);

(iv) Any demonstration, certification, declaration of construction, finding, monitoring, testing, or analytical data as required by WAC 173-351-400 (Ground water monitoring systems and corrective action);

(v) Major deviations from the plan of operation required in WAC 173-351-210; and

(vi) Daily records of weights or volumes of solid waste and, if available, types of waste received at the facility.

(b) The owner or operator must notify the jurisdictional health department when the documents from (a) of this subsection have been placed in or added to the operating record, unless:

(i) Such documents have been made a part of a permit application under this regulation;

(ii) Notification occurs under the renewal application requirements of WAC 173-351-730 (3)(b)(iv); or

(iii) The documents are daily records of weights or volumes specified in WAC 173-351-200 (10)(a)(vi).

(c) The jurisdictional health department can set alternative schedules during the permitting process of WAC 173-351-700 for recordkeeping and notification requirements as specified in (a) and (b) of this subsection, except for the notification requirements in WAC 173-351-130 (2)(b), the Federal Aviation Administration and in WAC 173-351-440 (6)(c), notification of land owners under assessment monitoring.

(d) All information contained in the operating record must be furnished upon request to the jurisdictional health department or be made available at all reasonable times for inspection by the jurisdictional health department and the department.

(11) Annual reports. Each owner or operator shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1 of each year. The annual report shall:

(a) Include information on facility activities during the previous year;

(b) Be on forms supplied by the department; and

(c) Include the following information:

(i) Facility location;

(ii) Facility contact;

(iii) Operational and/or post-closure information;

(iv) Permit status;

(v) Compliance information;

(vi) Facility capacity information;

(vii) Information on ground water monitoring as required in WAC 173-351-415(1) except, prior to the effective date of the ground water monitoring requirements of WAC 173-351-400, ground water monitoring information and existing summaries collected under ground water monitoring systems installed according to chapter 173-304 WAC.

(viii) Information on violation of ambient standards for surface water and explosive gases whose monitoring is required by chapter 173-351 WAC or performed as part of the permit issued under WAC 173-351-700; and

(ix) Other information as required.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-200, filed 10/26/93, effective 11/26/93.]

WAC 173-351-210 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 173-351-700. The plan of operation 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 of operation or the plan must be so modified with the approval of the jurisdictional health department.

Each plan of operation shall include:

(1) How solid wastes are to be handled on-site during its active life including transportation, routine filling, grading, cover, and housekeeping;

(2) How inspections are conducted and their frequency;

(3) Actions to take if there is a fire or explosion;

(4) Actions to take for sudden releases (e.g., failure of run-off containment system);

(5) How equipment such as leachate collection and gas collection equipment are to be operated and maintained;

(6) A safety plan or procedure; and

(7) Other such details as required by the jurisdictional health department.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-210, filed 10/26/93, effective 11/26/93.]

WAC 173-351-220 Additional operating criteria. All owners or operators of MSWLF units shall operate the facility so as to:

(1) Control road dust;

Note: Operators should carefully select dust suppressants approved by the jurisdictional health departments that do not pose a threat to surface or ground water quality.

(2) Collect scattered litter as necessary to prevent vector harborage, a fire hazard, an aesthetic nuisance, or adversely affect wildlife or its habitat;

(3) Prohibit scavenging;

(4) Landfill personnel. All landfills shall:

(a) Ensure that at least two landfill personnel are on-site with one person at the active portion when the site is open to the public for landfills with a permitted capacity of greater than fifty thousand cubic yards per year; and

(b) Comply with the certification requirements of chapter 173-300 WAC, Certification of operators of solid waste incinerator and landfill facilities.

Note: The definition of operators in chapter 173-300 WAC is not the same as the definition of operator in this rule.

(5) Ensure that reserve operational equipment shall be available to maintain and meet these standards;

(6) Clearly mark the active area boundaries authorized in the permit, with permanent posts or using equivalent method clearly visible for inspection purposes;

(7) Thoroughly compact the solid waste before succeeding layers are added except for the first lift over a liner;

(8) Maintain the monitoring system required in WAC 173-351-400, Ground water monitoring systems and corrective action, WAC 173-351-200(4), explosive gas monitoring of this regulation and any other monitoring specified in the permit issued in WAC 173-351-700.

(9) Require recycling.

(a) All owners and operators shall provide the opportunity for the general public to conveniently recycle cans, bottles, paper, and other material brought to the landfill site and for which a market exists or as required according to the most recently adopted county comprehensive solid waste management plan:

(i) During the normal hours of operation; and

(ii) In facilities convenient to the public (i.e., near entrance to the gate).

(b) Owners or operators shall conduct recycling activities in an orderly, sanitary manner and in a way that does not interfere with MSWLF operations.

(c) Owners or operators may demonstrate during the permit process of WAC 173-351-700 alternative means to providing an opportunity to the general public to recycle household solid waste including other conveniently located facilities which offer recycling opportunities.

(10) Prohibiting disposal of municipal sewage sludge or biosolids in MSWLF units.

(a) The disposal of municipal sewage sludge or biosolids or any material containing municipal sewage sludge or biosolids in a MSWLF unit is prohibited unless the municipal sewage sludge or biosolids or material containing municipal sewage sludge or biosolids is not a liquid as defined in this rule, and such disposal is specifically approved as part of a valid NPDES permit, or a valid permit issued in accordance with chapter 70.95J RCW and rules promulgated under that authority.

(b) Notwithstanding WAC 173-351-220 (10)(a), the jurisdictional health department may allow disposal of municipal sewage sludge or biosolids, or any material containing municipal sewage sludge or biosolids in a landfill on a temporary basis if the jurisdictional health department determines that a potentially unhealthful circumstance exists and other management options are unavailable or would pose a threat to human health or the environment.

(c) In accordance with (b) of this subsection upon determination that a potentially unhealthful circumstance exists, the jurisdictional health department shall notify the department in writing, of its findings and basis for its determination. In its notification, the jurisdictional health department shall state the date on which disposal is approved to commence, any conditions and the date after which continued disposal shall be prohibited.

(d) For the purposes of this regulation, the use of sewage sludge or biosolids or any material containing sewage sludge or biosolids, which is subject to regulation under 40 CFR Part 503 and or chapter 70.95J RCW, as daily cover or as an amendment to daily cover shall be considered disposal.

(11) 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.

(12) Jurisdictional health department inspection of activities. In accordance with RCW 70.95.190, employees of the jurisdictional health department or their agents may enter upon, inspect, sample, and move freely about the premises of any MSWLF, after presentation of credentials.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-220, filed 10/26/93, effective 11/26/93.]

WAC 173-351-300 Design criteria. (1) Applicability. Existing MSWLF units are not subject to this section. Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management, including operating plans approved under chapter 173-304 WAC.

(2) New MSWLF units and lateral expansions shall be constructed:

(a) For nonarid landfills, in accordance with a standard design as follows:

(i) A composite liner as defined in (a)(ii) of this subsection and a leachate collection system that is designed and constructed to maintain less than a 1 foot (30 cm) depth of leachate over the liner.

Note: Leachate head in leachate pump sump areas, only, shall not be allowed to exceed two feet (60 cm).

(ii) For purpose of this section, "composite liner" means a system consisting of two components; the upper component must consist of a minimum of 60 mil thickness high density polyethylene (HDPE) geomembrane. The lower component must consist of at least a two-foot (60 cm) layer of compacted soil with a hydraulic conductivity of no more than $1X10^{-7}$ cm/sec. The geomembrane must be installed in direct and uniform contact with the compacted soil component. Thinner geomembranes of other than high density polyethylene may be used provided that a demonstration can be made that the alternative has equivalent mechanical strength, permeability, chemical resistance and other factors under conditions of construction and use. Minimum thickness of geomembranes other than high density polyethylene shall be 30 mils.

(iii) Equivalent liner designs and liner materials may be used provided a demonstration during the permitting process of WAC 173-351-700 can be made that the liner is equivalent to the composite liner design:

(A) With respect to hydraulic effectiveness as shown by the use of the hydraulic evaluation of landfill performance (HELP) model or other approved models or methods;

(B) With respect to mechanical strength;

(C) With respect to chemical resistance;

(D) With respect to potential physical damage during construction and operation;

(E) With respect to attenuative capacity; and

(F) And other factors identified by the jurisdictional health department and the department on a case-by-case basis.

(b) For arid landfills, in accordance with a design that ensures that the maximum contaminant levels listed in Table 1 of this section will not be exceeded in the hydrostratigraphic unit(s) identified in the hydrogeologic characterization/report at the relevant point of compliance as specified during the permitting process in WAC 173-351-700. When approving a design that complies with the arid landfill design of (b) of this subsection, the jurisdictional health department shall consider at least the following factors:

(i) The hydrogeologic characteristics of the facility and surrounding land;

(ii) The climatic factors of the area; and

(iii) The volume, physical and chemical characteristics of the leachate.

Note: When determining the need for a liner in arid settings and its ability to meet the performance standard of this section, considering (b)(i), (ii), and (iii) of this subsection, the owner or operator may use:

(A) Existing information such as vadose zone, ground water monitoring, or leachate characterization that has previously been conducted at the facility;

(B) Contaminant transport modeling in accordance with the requirements of WAC 173-351-480; and/or

(C) Other information determined as appropriate and relevant by the jurisdictional health department.

(c) The relevant point of compliance approved during the permitting process in WAC 173-351-700, shall be no more than one hundred fifty meters (four hundred ninety-two feet) from the waste management unit boundary and shall be located on land owned by the owner of the MSWLF unit. In approving the relevant point of compliance the jurisdictional health department shall consider at least the following factors:

(i) The hydrogeologic characteristics of the facility and surrounding land;

(ii) The volume, and physical/chemical characteristics of the leachate;

(iii) The quantity and quality, and direction, of flow of ground water;

(iv) The proximity and withdrawal rate of the ground water users;

(v) The availability of alternative drinking water supplies;

(vi) The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water, and whether the ground water is currently used or reasonably expected to be used for drinking water;

(vii) Public health, safety, and welfare effects; and

(viii) Practical capability of the owner or operator.

TABLE 1

CHEMICAL	Maximum Contaminant Levels (MCL (mg/l))
ARSENIC	0.00005
BARIUM	1.0
BENZENE	0.001
CADMIUM	0.01
CARBON TETRACHLORIDE	0.0003
CHROMIUM (HEXAVALENT)	0.05
2,4-DICHLOROPHENOXY ACETIC ACID	0.1
1,4-DICHLOROBENZENE	0.004
1,2-DICHLOROETHANE	0.0005
1,1 DICHLOROETHYLENE	0.007
ENDRIN	0.0002
FLUORIDE	4
LINDANE	0.00006
LEAD	0.05
MERCURY	0.002
METHOXYCHLOR	0.1
NITRATE	10
SELENIUM	0.01
SILVER	0.05
TOXAPHENE	0.00008
1,1,1-TRICHLOROETHANE	0.20
TRICHLOROETHYLENE	0.003
2,4,5-TRICHLOROPHENOXY ACETIC ACID	0.01
VINYL CHLORIDE	0.00002

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-300, filed 10/26/93, effective 11/26/93.]

WAC 173-351-400 Ground water monitoring systems and corrective action. (1) Applicability.

(a) The requirements of WAC 173-351-400 through WAC 173-351-490 apply to MSWLF units whose owners and operators are required to perform ground water monitoring under chapter 173-351 WAC.

(b) Owners and operators of MSWLF units must comply with the ground water monitoring requirements of this regulation according to the following schedule:

(i) Existing MSWLF units and lateral expansions less than one mile (1.6 kilometers) from a drinking water intake (surface or subsurface) must be in compliance with the ground water monitoring requirements specified in WAC 173-351-400 through 173-351-450, and 173-351-490 by October 9, 1994;

Note: A drinking water intake is any surface water or ground water intake that is used for the purposes of drinking water i.e., water supply wells.

(ii) Existing MSWLF units and lateral expansions greater than one mile (1.6 kilometers) from a drinking water intake (surface or subsurface) must be in compliance with the ground water monitoring requirements specified in WAC 173-351-400 through 173-351-450, and 173-351-490 by October 9, 1995;

(iii) New MSWLF and lateral expansions units must be in compliance with the ground water monitoring requirements specified in WAC 173-351-400 through 173-351-450, and 173-351-490 before waste can be placed in the MSWLF unit.

(c) Existing MSWLF units and lateral expansions with ground water contamination as defined under WAC 173-304-100 and chapter 173-200 WAC must begin an assessment ground water monitoring program under WAC 173-351-440 by October 9, 1994.

(d) Interim ground water monitoring programs. Prior to the compliance schedules in (b) of this subsection, all existing MSWLF units and lateral expansions must either:

(i) Continue to monitor under WAC 173-304-490; or

(ii) Begin to monitor under this section.

(e) All MSWLF units closed in accordance with chapter 173-304 WAC must continue to monitor ground water in accordance with chapter 173-304 WAC.

(2) Personnel qualifications. For the purposes of this regulation, a "qualified ground water scientist" must be a hydrogeologist, geologist, engineer, or other scientist who meets all of the following criteria:

(a) Has received a baccalaureate or post-graduate degree in the natural sciences or engineering; and

(b) Has sufficient training and experience in ground water hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgments regarding ground water monitoring, contaminant fate and transport, and corrective action.

(3) A qualified ground water scientist is required to prepare the following reports, demonstrations and information:

(a) The hydrogeologic report(s) of WAC 173-351-490;

(b) The ground water monitoring program(s) including the ground water monitoring system design and well placement of WAC 173-351-405; the ground water sampling and analysis plan of WAC 173-351-410; the detection monitoring program(s) of WAC 173-351-430; and the assessment monitoring program(s) of WAC 173-351-440;

(c) Any demonstration(s) under WAC 173-351-430 (4)(c) or 173-351-440 (6)(e), or 173-351-140(1);

(d) Any modification(s) proposals/requests to the approved ground water monitoring program in accordance with WAC 173-351-450; and

(e) Any ground water modeling demonstrations made under WAC 173-351-480.

Note: A hydrogeologist or other qualified ground water scientist is **NOT** required for the actual ground water sampling.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-400, filed 10/26/93, effective 11/26/93.]

WAC 173-351-405 Performance standards for ground water monitoring system designs. Ground water monitoring well placement.

The ground water monitoring system design shall meet the following performance criteria:

(1) A sufficient number of wells must be installed at appropriate locations and depths to yield representative ground water samples from those hydrostratigraphic units which have been identified as the earliest target hydraulic pathways and conduits of flow for ground water and contaminant movement, and storage.

(2) The number, spacing, and depths of monitoring wells must be based on the site characteristics including the area of the MSWLF unit and the hydrogeological characterization of WAC 173-351-490, and requires a demonstration based on all of the following information:

(a) A ground water flow path analysis which supports why the chosen hydrostratigraphic unit best serves the installation of a detection or assessment ground water monitoring well system capable of providing early warning detection of any ground water contamination.

(b) Documentation and calculations of all of the following information:

(i) Hydrostratigraphic unit thicknesses including confining units and transmissive units;

(ii) Vertical and horizontal ground water flow directions including seasonal, man-made, or other short term fluctuations in ground water flow;

(iii) Stratigraphy and lithology;

(iv) Hydraulic conductivity; and

(v) Porosity and effective porosity.

(3) Hydraulically placed upgradient wells (background wells) must meet the following performance criteria:

(a) Must be installed in ground water that has not been affected by leakage from a MSWLF unit; or

(b) If hydrogeologic conditions do not allow for the determination of a hydraulically placed upgradient well then sampling at other monitoring wells which provide representative background ground water quality may be allowed; and

(4) Hydraulically placed down-gradient wells (compliance wells) must meet the following performance criteria:

(a) Represent the quality of ground water passing the relevant point of compliance specified by the jurisdictional health department. The downgradient monitoring system must be installed at the relevant point of compliance specified by the jurisdictional health department during the permitting process of WAC 173-351-700. Additional wells may be required by the jurisdictional health department based upon areal extent of the MSWLF unit, complex hydrogeologic settings or to define the extent of contamination under WAC 173-351-440 and 173-351-450.

(b) When physical obstacles preclude installation of ground water monitoring wells at the relevant point of compliance at existing units, the downgradient monitoring system may be installed at the closest practicable distance hydraulically down gradient from the relevant point of compliance that ensures detection of ground water contamination in the chosen hydrostratigraphic unit.

(5) All monitoring wells must be cased in a manner that maintains the integrity of the bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of samples. The annular space between the bore hole and well casing above the sampling depth must be sealed to prevent contamination of samples and ground water. All wells must be constructed in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of water wells and chapter 173-162 WAC, Regulation and licensing of well contractors and operators. All wells must be clearly labeled, capped, and locked.

(6) The owner or operator must apply for a permit modification under WAC 173-351-720(5) or must apply during the renewal process of WAC 173-351-720 (1)(i), for any proposed changes to the design, installation, development, and decommission of any monitoring wells, piezometers, and other measurement, sampling, and analytical devices. Upon completing changes, all documentation, including date of change, new well location maps, boring logs, and well diagrams must be submitted to the jurisdictional health department and must be placed in the operating record of WAC 173-351-200(10).

(7) All monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

(8) The ground water monitoring system and hydrogeologic report including any changes to the ground water monitoring system shall be prepared by a hydrogeologist or other qualified ground water scientist and include a statement of personnel qualifications.

(9) The prepared ground water monitoring system design and hydrogeologic report must be made a part of the permit application in accordance with WAC 173-351-730 (1)(b)(iii).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-405, filed 10/26/93, effective 11/26/93.]

WAC 173-351-410 Ground water sampling and analysis requirements. (1) The ground water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground water quality at the background and downgradient wells installed in compliance with WAC 173-351-400 and with this section. The owner or operator must submit the sampling and analysis program documentation as a part of the permit application in accordance with WAC 173-351-730 (1)(b)(iii). The program must include procedures and techniques for:

(a) Sample collection and handling;

(b) Sample preservation and shipment;

(c) Analytical procedures;

(d) Chain-of-custody control;

(e) Quality assurance and quality control;

(f) Decontamination of drilling and sampling equipment;

(g) Procedures to ensure employee health and safety during well installation and monitoring; and

(h) Well operation and maintenance procedures.

(2) The ground water monitoring program must include sampling and analytical methods that are appropriate for ground water sampling and that accurately measure hazardous constituents and other monitoring parameters in ground water samples or reflect an acceptable practical quantitation limit (PQL). Ground water samples shall not be field-filtered for organic constituents prior to laboratory analysis. All analyses must be sent to an accredited laboratory in accordance with chapter 173-50 WAC, Accreditation of environmental laboratories.

(3) Ground water elevations must be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator must determine the rate and direction of ground water flow each time ground water is sampled. Ground water elevations in wells which monitor the same MSWLF unit must be measured within a period of time short enough to avoid any ground water fluctuations which could preclude the accurate determination of ground water flow rate and direction. All ground water elevations must be determined:

(a) By a method that ensures measurement to the 0.01 (one/one hundredth) of a foot (3mm) relative to the top of the well casing; and

(b) The orthometric elevation of the top of the well casing is related to a vertical benchmark based on the national geodetic vertical datum of 1929 (NGVD 29) and be established to 3rd order classification standards per federal geodetic control committee, or its successor, as specified in WAC 332-130-060.

(4) The owner or operator must establish background ground water quality in hydraulically placed upgradient or background well(s) for each of the monitoring parameters or constituents required in the particular ground water monitoring program that applies to the MSWLF unit, as determined under this section. Background ground water quality may be established at wells that are not located hydraulically upgradient from the MSWLF unit if it meets the requirements of WAC 173-351-400 through 173-351-490.

(5) The number of samples collected to establish water quality data must be consistent with the appropriate statistical procedures determined pursuant to WAC 173-351-420. The sampling procedures shall be those specified under WAC 173-351-430 for detection monitoring, WAC 173-351-440 for assessment monitoring, and WAC 173-351-440(6) of corrective action.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-410, filed 10/26/93, effective 11/26/93.]

WAC 173-351-415 Ground water reporting. (1) The annual report shall be included with the facility annual report as required in WAC 173-351-200(11) and shall be on forms developed by the department which will request the following information:

(a) A brief summary of statistical results and/or any statistical trends including any findings of any statistical increases for the year;

(b) A brief summary of ground water flow rate and direction for the year, noting any trends or changes;

(c) A Xerox copy of all potentiometric surface maps developed for each quarter or approved semi-annual period; and

(d) A summary geochemical evaluation noting any changes or trends in the cation-anion balances, Trilinear diagrams and general water chemistry for each well.

(2) A quarterly ground water report shall be submitted to the jurisdictional health department and the department no later than sixty days after the receipt of the quarterly analytical data and shall include all of the following:

(a) All ground water monitoring data for the sampling period;

(b) All statistical calculations and summaries;

(c) Notification of any statistical increase and concentrations above MCL's;

(d) Static water level readings for each monitoring well for each sampling event;

(e) Potentiometric surface elevation maps depicting ground water flow rate and direction;

(f) Cation-anion balances and Trilinear diagrams; and

(g) Leachate analyses.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-415, filed 10/26/93, effective 11/26/93.]

WAC 173-351-420 Statistical methods for ground water monitoring. (1) The owner or operator must calculate and evaluate all of the following statistics using background ground water quality data:

(a) The background mean;

(b) The background variance;

(c) The standard deviation of the background data;

(d) The coefficient of variation of the background data;

(e) The standard error of the background data; and

(f) Other statistics testing for homogeneity of variance and the normality of the background data.

(2) The owner or operator must specify in the permit application in accordance with WAC 173-351-730 (1)(b)(iii) one of the following statistical methods to be used in evaluating ground water monitoring data for each hazardous constituent. The statistical test chosen shall be conducted separately for each hazardous constituent in each well. The statistical methods to be used are:

(a) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit;

(b) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent;

(c) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent;

(d) A control chart approach that gives control limits for each constituent; or

(e) Another statistical test method that meets the performance standards of this section. The owner or operator must place a justification for this alternative in the permit application in accordance with WAC 173-351-730 (1)(b)(iii). The justification must demonstrate that the alternative method meets the performance standards of this section.

(3) Any statistical method chosen under this section shall comply with the following performance standards, as appropriate:

(a) The statistical method used to evaluate ground water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data must be evaluated to determine if nonnormal conditions are due to laboratory or sampling error, poor well construction, seasonal or spatial variability, or actual site conditions. Transformed or a distribution-free theory test may be used, upon a determination of why nonnormal conditions exist. If the distributions for the

constituents differ, more than one statistical method may be needed.

(b) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparison procedure is used, the Type I experiment wise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(c) If a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values shall be protective of human health and the environment. The parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(d) If a tolerance interval or a predictional interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(e) The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (PQL) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

(f) If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(4) The owner or operator must determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular ground water monitoring program that applies to the MSWLF unit after each sampling event and as determined under this section.

(a) In determining whether a statistically significant increase has occurred, the owner or operator must compare the ground water quality of each parameter or constituent at each monitoring well designated pursuant to WAC 173-351-430 or 173-351-440 to the background value of that constituent, according to the statistical procedures and performance standards specified under this section.

(b) Within thirty days after receipt of the analytical data, the owner or operator must determine whether there has been a statistically significant increase over background at each monitoring well (at all hydraulically placed upgradient and downgradient wells).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-420, filed 10/26/93, effective 11/26/93.]

WAC 173-351-430 Detection monitoring program. (1) Detection monitoring is required at MSWLF units at all ground water monitoring wells defined under WAC 173-351-405. At a minimum, a detection monitoring program must include the monitoring for the constituents listed in Appendix I and II of this regulation.

(2) Background data development.

(a) A minimum of eight independent samples shall be collected for each well (background and downgradient) and must be collected and analyzed for the Appendix I constituents for the first year of ground water monitoring.

(b) Each independent sampling event shall be no less than one month apart from the previous independent sampling event.

(c) Sampling for Appendix II parameters shall be done quarterly.

(d) MSWLF units which have previously developed background for those constituents listed in Appendix I will be waived from (a) of this subsection on a parameter by parameter basis providing all performance criteria of WAC 173-351-400 are met.

(3) Foreground data development. The monitoring frequency for all constituents listed in Appendix I and II shall be quarterly during the active life of the MSWLF unit including closure and the post-closure period and begins after the first year of background data development, for all monitoring wells (upgradient and downgradient).

Note: Foreground denotes the period of time following the development of the back ground data set, for all monitoring wells (upgradient and downgradient).

(4) If the owner or operator determines, pursuant to WAC 173-351-420, that there is a statistically significant increase over background for one or more of the constituents listed in Appendix I, at any monitoring well at the boundary specified under WAC 173-351-405, the owner or operator:

(a) Must, within fourteen days of this finding, place a notice in the operating record indicating which constituents have shown statistically significant changes from background levels, and send the same notice to the jurisdictional health department and the department;

(b) Must establish an assessment monitoring program meeting the requirements of WAC-173-351-440 within ninety days except as provided for in (c) of this subsection;

(c) May demonstrate that a source other than a MSWLF unit caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be prepared by a hydrogeologist or other qualified ground water scientist and approved by the jurisdictional health department and be placed in the operating record. If a successful demonstration is made and documented, the owner or operator may continue detection monitoring as specified in this section. If, after ninety days, a successful demonstration is not made, the owner or operator must initiate an assessment monitoring program as required in WAC 173-351-440; and

(d) Must submit the assessment monitoring program to the jurisdictional health department at the end of ninety days as provided in (b) of this subsection.

(5) A geochemical evaluation of Appendix II parameters shall be conducted at each well on a quarterly basis and include all of the following methods:

(a) A cation-anion balance evaluating the difference between the cation and anion sums expressed in milliequivalents per liter; if a greater than a five to ten percent difference occurs then the owner or operator shall provide a summary explanation and examine whether the difference is due to a laboratory error, poor well conditions, or other ions not accounted for in natural or impacted ground water conditions; if the total cation-anion sums are less than 5.0 meq/liter then a ten percent difference threshold, may be used.

(b) A plot of cations and anions for each well on a trilinear diagram, as recommended in hydrogeologic texts and/or the department guidance documents.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-430, filed 10/26/93, effective 11/26/93.]

WAC 173-351-440 Assessment monitoring program. (1) Assessment monitoring is required whenever a statistically significant increase over background has been detected for one or more of the constituents listed in the Appendix I or in the alternative list approved in accordance with WAC 173-351-450, Alternative ground water monitoring programs.

(2) Within ninety days of triggering into an assessment monitoring program, and quarterly thereafter, the owner or operator must sample and analyze the ground water for all constituents identified in Appendix III of this part. A minimum of one sample from each downgradient well must be collected and analyzed during each sampling event. For any constituent detected in the downgradient wells as a result of the complete Appendix III analysis, a minimum of four independent samples from each well (background and downgradient) must be collected within a time period of one hundred eighty days, and analyzed to establish background for the constituents. Each independent sample shall be collected no less than one month apart from the previous sampling event.

(3) After obtaining the results from the initial or subsequent sampling events required in subsection (2) of this section, the owner or operator must:

(a) Within fourteen days, notify the jurisdictional health department of the increase, identifying the Appendix III constituent(s) that have been detected and place this notice in the operating record;

(b) Within ninety days, and on a quarterly basis thereafter, resample all wells, conduct analyses for all constituents in Appendix I and II, and, for those constituents in Appendix III that are detected in response to subsection (2) of this section, record their concentrations in the facility operating record and notify the jurisdictional health department. At least one sample from each well (background and downgradient) must be collected and analyzed during these sampling events;

(c) Establish background concentrations for any constituents detected pursuant to subsection (2) of this section;

(d) Establish ground water protection standards for all constituents detected pursuant to subsection (2) or (3) of this section. The ground water protection standards shall be established in accordance with subsection (7) of this section; and

(e) Continue performing geochemical evaluations in accordance with WAC 173-351-430(5) on a quarterly basis.

(4) If the concentrations of all Appendix III constituents are shown to be at or below background values, using the statistical procedures in WAC 173-351-420, for two consecutive sampling events, and before returning to detection monitoring the owner or operator must:

(a) Notify the jurisdictional health department of this finding;

(b) Receive approval in writing from the jurisdictional health department; and

(c) Place the notice and the approval in (a) and (b) of this subsection in the operating record of WAC 173-351-200(10).

(5) If the concentrations of any Appendix III constituents are above background values, but all concentrations are below the ground water protection standard established under subsection (7) of this section, using the statistical procedures in WAC 173-351-420, the owner or operator must continue assessment monitoring in accordance with this section.

(6) If one or more Appendix III constituents are detected at statistically significant levels above the ground water protection standard established under subsection (7) of this section in any sampling event, the owner or operator must, within fourteen days of this finding, notify the jurisdictional health department, the department and all appropriate local government officials of the increase and place a notice in the operating record identifying the Appendix III constituents that have exceeded the ground water protection standard. The owner or operator also:

(a) Must characterize the chemical composition of the release, the contaminant fate and transport characteristics; the rate and extent of contamination in all ground water flow paths by installing additional monitoring wells;

(b) Must install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with subsection (2) of this section;

(c) Must notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site if indicated by sampling of wells in accordance with subsection (6) of this section; and

(d) Must initiate an assessment, selection, and implementation of corrective measures as required by chapter 173-340 WAC, the Model Toxics Control Act regulation; or

(e) May demonstrate that a source other than a MSWLF unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be prepared by a hydrogeologist or other qualified ground water scientist and approved by the jurisdictional health department and placed in the operating record. If a successful demonstration is made the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this section, and may return to detection monitoring if the Appendix III constituents are at or below background as specified in subsection (4) of this section. Until a successful demonstration is made, the owner or operator must comply

with this subsection (6) including initiating an assessment of corrective measures.

(7) The owner or operator:

(a) Must establish a ground water protection standard using the ground water quality criteria of chapter 173-200 WAC; and

(b) For constituents for which the background level is higher than the protection standard identified under (a) of this subsection, must use the background concentration for the constituents established from wells in accordance with WAC 173-351-405 through 173-351-430.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-440, filed 10/26/93, effective 11/26/93.]

WAC 173-351-450 Alternate ground water monitoring programs. (1) The owner or operator may propose changes and/or alternate ground water monitoring programs for detection after the second year of ground water monitoring under WAC 173-351-430, or the assessment monitoring program of WAC 173-351-440 as follows:

(a) An alternate ground water monitoring frequency for sampling and analysis of Appendix I and II constituents of no less than semiannual monitoring;

(b) A deletion or alternate ground water monitoring constituents for Appendix I, II and III;

(c) An appropriate subset of wells to be sampled and analyzed for Appendix III under WAC 173-351-440(2).

(2) All proposed changes in ground water monitoring frequency must be no less than semiannually for detection ground water monitoring and no less than quarterly for assessment monitoring. The owner or operator must apply for a permit modification under WAC 173-351-720(5) or must apply during the renewal process of WAC 173-351-720 (1)(i) for changes in ground water monitoring frequency making a demonstration based on the following information:

(a) A characterization of the hydrostratigraphic unit(s) including the unsaturated zone, transmissive and confining units and include all of the following:

(i) Hydraulic conductivity; and

(ii) Ground water flow rates.

(b) Minimum distance between upgradient edge of the MSWLF unit and downgradient monitoring wells (minimum distance of travel); and

(c) Contaminant fate and transport characteristics.

(3) The owner or operator must apply for a permit modification under WAC 173-351-720(5) or must apply during the renewal process of WAC 173-351-720 (1)(i) for all proposed deletions or changes to ground water monitoring constituents of Appendix I, II, and III based on all of the following information:

Verification that the removed constituents are not reasonably expected to be in or derived from the waste contained in the unit, by:

(a) Leachate monitoring results consisting of those parameters listed in Appendix IV; all leachate monitoring shall be quarterly unless otherwise approved by the jurisdictional health department and the department;

(b) The types, quantities, and concentrations of constituents in wastes managed at the MSWLF unit;

(c) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the MSWLF unit;

(d) The detectability of indicator parameters, waste constituents, and reaction products in the ground water; and

(e) The concentration or values and coefficients of variation of monitoring parameters or constituents in the ground water background.

(4) Multi-unit ground water monitoring systems.

An owner or operator may propose during the permitting process of WAC 173-351-700 a multi-unit ground water monitoring system instead of separate ground water monitoring systems for each MSWLF unit, including MSWLF units which were closed in accordance with chapter 173-351, 173-304, or 173-301 WAC when the facility has several MSWLF units, provided the multi-unit system meets all of the requirements of WAC 173-351-400 through WAC 173-351-490 and will be as protective of human health and environment as individual ground water monitoring systems for each MSWLF unit. Permit approval for multi-unit ground water monitoring systems and programs will be based on the ability to provide early warning detection of any contaminant releases including:

(a) Number, spacing, and orientation of units;

(b) Hydrogeologic setting;

(c) Site history;

(d) Engineering design of the MSWLF units;

(e) Type of waste accepted at the MSWLF units; and

(f) Leachate analysis as referenced in subsection (3)(a) of this section.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-450, filed 10/26/93, effective 11/26/93.]

WAC 173-351-460 Role of jurisdictional health department in corrective action. The jurisdictional health department:

(1) May participate in all negotiations, meetings, and correspondence between the owner and operator and the department in implementing the model toxics control action;

(2) May comment upon and participate in all decisions made by the department in assessing, choosing, and implementing a corrective action program;

(3) Shall require the owner or operator to continue closure and post-closure activities as appropriate under these rules, after corrective action measures are completed; and

(4) Shall continue to regulate all MSWLF units during construction, operation, closure and post-closure, that are not directly impacted by Model Toxics Control Act.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-460, filed 10/26/93, effective 11/26/93.]

WAC 173-351-465 Role of department of ecology in corrective action. The department shall carry out all the responsibilities assigned to it under the Model Toxics Control Act (MTCA), chapter 70.105D RCW, during the corrective action process.

Note: Ecology encourages and will support owners or operators who perform independent corrective action(s) consistent with MTCA.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-465, filed 10/26/93, effective 11/26/93.]

WAC 173-351-480 Ground water modeling. All ground water and contaminant fate and transport modeling must meet the following performance standards:

(1) The model shall have supporting documentation that establishes its ability to represent ground water flow and contaminant transport and any history of previous applications;

(2) The set of equations representing ground water movement and contaminant transport must be theoretically sound and well documented;

(3) The numerical solution methods must be based upon sound mathematical principles and be supported by verification and checking techniques;

(4) The model must be calibrated against site-specific field data;

(5) A sensitivity analysis shall be conducted to measure the model's responses to changes in the values assigned to major parameters, specified tolerances, and numerically assigned space and time discretizations;

(6) Mass balance calculations on selected elements in the model shall be performed to verify physical validity. Where the model does not prescribe the amount of mass entering the system as a boundary condition, this step may be ignored;

(7) The values of the model's parameters requiring site specific data shall be based upon actual field or laboratory measurements; and

(8) The values of the model's parameters which do not require site specific data shall be supported by laboratory test results or equivalent methods documenting the validity of the chosen parameter values.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-480, filed 10/26/93, effective 11/26/93.]

WAC 173-351-490 The hydrogeologic report contents. (1) The hydrogeologic report shall meet all of the following performance standards as follows:

(a) Examine existing site conditions for compliance with ground water and surface water location restrictions under WAC 173-351-130 and 173-351-140;

(b) Determine existing or background ground water quality conditions, including any ground water contamination; and

(c) Define a detection ground water monitoring program capable of immediate and early warning detection for potential contamination as required in WAC 173-351-400 and the information required in subsection (2) of this section.

(2) The hydrogeologic report contents shall include the following information:

(a) A summary of local and regional geology and hydrology, including faults, zones of joint concentrations, unstable slopes and subsidence areas on site; areas of ground water recharge and discharge; stratigraphy; erosional and depositional environments and facies interpretation(s);

(b) A borehole program which identifies all performance criteria of WAC 173-351-405 including lithology, soil/bedrock types and properties, preferential ground water flow paths or zones of higher hydraulic conductivity, the presence of confining unit(s) and geologic features such as fault zones, cross-cutting structures etc., and the target hydrostratigraphic unit(s) to be monitored.

(i) A minimum of twenty subsurface borings is required for MSWLF sites which are 50 acres or less in aerial extent. For sites greater than fifty acres, twenty borings, plus three borings for each additional ten acres thereafter, is required. Soil borings shall be established in a grid pattern with a boring in each major geomorphic feature such as topographic divides and lowlands;

(ii) Each boring will be of sufficient depth below the proposed grade of the bottom liner as to identify soil, bedrock and hydrostratigraphic unit(s) conditions as required in WAC 173-351-405.

(iii) The jurisdictional health department and the department may approve alternate methods including geophysical techniques, either surface or downhole including electric logging, some sonic logging, nuclear logging, seismic profiling, electromagnetic profiling and resistivity profiling in lieu of some of the number of borings required in the subsurface borehole program of (b)(i) of this subsection, provided sufficient hydrogeological site characterization can be accomplished and prior approval is obtained.

(iv) At each boring samples shall be collected from each lithologic unit and tested for all of the following:

(A) Particle size distribution by both sieve and hydrometer analyses in accordance with approved ASTM methods (D422 and D1120);

(B) Atterburg limits following approved ASTM methods (D4318); and

(C) Classification under the unified soil classification system, following ASTM standard D2487-85.

(iv) Each lithologic unit on site will be analyzed for:

(A) Moisture content, following approved ASTM methods (D2216); and

(B) Hydraulic conductivity by an in-situ field method or laboratory method approved by the jurisdictional health department and the department. All samples collected for the determination of permeability shall be collected by standard ASTM procedures.

(v) All boring logs shall be submitted with the following information:

(A) Soil and rock descriptions and classifications;

(B) Method of sampling;

(C) Sample depth;

(D) Date of boring;

(E) Water level measurements;

(F) Soil test data;

(G) Boring location; and

(H) Standard penetration number of ASTM standard D1586-67.

(vi) All borings not converted to monitoring wells or piezometers shall be carefully backfilled, plugged and recorded in accordance with WAC 173-160-420.

(vii) During the borehole drilling program, any on-site drilling and lithologic unit identification must be performed by a hydrogeologist, geologist or other qualified ground water scientist who is trained to sample and identify soils and bedrock lithology.

(c) Depths to ground water and hydrostratigraphic unit(s) including transmissive and confining units;

(d) Potentiometric surface elevations and contour maps; direction and rate of horizontal and vertical ground water flow;

(e) A description of regional ground water trends including vertical and horizontal flow directions and rates;

(f) All elevations and top of well casings shall be related to the national geodetic vertical datum of 1929 (NGVD 29) and the horizontal datum shall be in accordance with chapter 58.20 RCW, Washington Coordinate System and as amended per chapter 332-130 WAC.

(g) Quantity, location, and construction (where available) of private and public wells within a two thousand foot (six hundred ten meter) radius of site;

(h) Tabulation of all water rights for ground water and surface water within a two thousand foot (six hundred ten meter) radius of the site;

(i) Identification and description of all surface waters within a one-mile (1.6 kilometer) radius of the site;

(j) A summary of all previously collected ground water and surface water analytical data, and for expanded facilities, identification of impacts of existing facility of the applicant to date upon ground and surface waters from landfill leachate discharges;

(k) Calculation of a site water balance;

(l) 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, including well construction diagrams;

(m) Land use in the area, including nearby residences; and

(n) A topographic map of the site and drainage patterns; an outline of the waste management area and MSWLF units, property boundary, the proposed location of ground water monitoring wells;

(o) Geologic cross-sections.

(3) Ground water flow path analysis. The hydrogeologic report shall include a summary ground water flow path analysis which includes all supportive documentation, and calculations of the performance criteria of WAC 173-351-405.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-490, filed 10/26/93, effective 11/26/93.]

WAC 173-351-500 Closure and post-closure care. (1) Closure criteria.

(a) Nonarid areas. Owners or operators of all MSWLF units located in areas having mean annual precipitation of equal to or greater than twelve inches, must install a final cover system that is designed to minimize infiltration and erosion.

(i) The final cover system must be designed and constructed to:

(A) Minimize infiltration through the closed MSWLF by the use of an anti-infiltration layer that contains a composite layer as defined in (a)(i)(B) of this subsection;

(B) For the purpose of this section, "composite layer" means a system consisting of two components; the upper component must consist of a minimum of 30 mil (0.76 mm) thickness of geomembrane (60 mils (1.5 mm) for high density polyethylene geomembranes). The lower component must consist of at least a two-foot (60 cm) layer of compacted soil with a hydraulic conductivity of no more than $1X10^{-5}$ cm/sec. The geomembrane must be installed in direct and uniform contact with the compacted soil component;

(C) Minimize erosion of the final cover by use of an anti-erosion layer that contains a minimum of a one-foot (30 cm) layer of earthen material of which at least six inches (15 cm) of the uppermost layer is capable of sustaining native plant growth; and

(D) Address anticipated settlement (with a goal of achieving no less than two to five percent slopes after settlement), drainage and/or the need for drainage layers, gas generation and/or the need for gas layers, freeze-thaw, desiccation and stability and mechanical strength of the design.

(ii) The jurisdictional health department may approve an alternative final cover design equivalent to that specified in (a)(i) of this subsection that includes:

(A) An anti-infiltration layer that achieves an equivalent reduction in infiltration as the anti-infiltration layer specified in (a)(i)(A) and (B) of this subsection;

(B) An anti-erosion layer that provides equivalent protection from wind and water erosion as the anti-erosion layer specified in (a)(i)(C) of this subsection; and

(C) The additional design features of (a)(i)(D) of this subsection.

(b) Arid areas. Owners or operators of all MSWLF units located in arid areas must install a final cover system that is designed to minimize infiltration and erosion.

(i) The final cover system must be designed and constructed to:

(A) Minimize infiltration through the closed MSWLF by the use of an anti-infiltration layer that contains at least a two-foot (60 cm) layer of compacted soil with a hydraulic conductivity of no more than $1X10^{-5}$ cm/sec;

(B) Minimize erosion of the final cover by use of an anti-erosion layer that contains a minimum of one-foot (30 cm) layer of earthen material of which at least six inches (15 cm) of the uppermost layer is capable of sustaining native plant growth; and

(C) Address anticipated settlement (with a goal of reaching two to five percent slopes after settlement), drainage and/or the need for drainage layers, gas generation and/or the need for gas layers, freeze-thaw, desiccation and stability and mechanical strength of the design.

(ii) The jurisdictional health department may approve an alternative final cover design to that specified in (b)(i) of this subsection that includes:

(A) An anti-infiltration layer that achieves an equivalent reduction in infiltration as the anti-infiltration layer specified in (b)(i)(A) of this subsection;

(B) An anti-erosion layer that provides equivalent protection from wind and water erosion as the anti-erosion layer specified in (b)(i)(B) of this subsection; and

(C) The additional design features of (b)(i)(C) of this subsection.

(c) The owner or operator must prepare a written closure plan that describes the steps necessary to close all MSWLF units at any point during its active life. The closure plan must be approved by the jurisdictional health department during the permit process of Section 700 and, at a minimum, must include the following information:

(i) A description of the final cover, designed in accordance with (a) or (b) of this subsection and the methods and procedures to be used to install the cover;

(ii) An estimate of the largest area of the MSWLF unit or all MSWLF units ever requiring a final cover as required under (a) or (b) of this subsection at any time during the active life;

(iii) An estimate of the maximum inventory of wastes ever on-site over the active life of the facility; and

(iv) A schedule for completing all activities necessary to satisfy the closure criteria in this subsection (1), Closure criteria including sequencing of each MSWLF unit and the use of intermediate cover.

(d) The owner or operator of existing MSWLF units must no later than the effective date of this chapter:

(i) Prepare a closure plan;

(ii) Place the closure plan in the operating record; and

(iii) Notify the jurisdictional health department that (d)(i) and (ii) of this subsection have occurred.

(e) One hundred eighty days (but no sooner than the effective date of this chapter) prior to beginning closure activities of each MSWLF unit or all MSWLF units as specified in (f) of this subsection, the owner or operator must:

(i) Notify the jurisdictional health department and the financial assurance trustee and/or insurer of the intent to close the MSWLF unit or all MSWLF units according to the approved closure plan; and

(ii) Submit final engineering closure plans for review, comment, and approval by the jurisdictional health department.

(f) The owner or operator must begin closure activities of each MSWLF unit or all MSWLF units no later than thirty days after the date on which the MSWLF unit or all MSWLF units receives the known final receipt of wastes or, if the MSWLF unit or all MSWLF units has remaining capacity and there is a reasonable likelihood that the MSWLF unit or all MSWLF units will receive additional wastes, no later than one year after the most recent receipt of wastes. Extensions beyond the one-year deadline for beginning closure may be granted by the jurisdictional health department if the owner or operator demonstrates during the permit process of WAC 173-351-700 that the MSWLF unit or all MSWLF units has the capacity to receive additional waste and the owner or operator has taken and will continue to take all steps including the application of intermediate cover necessary to prevent threats to human health and the environment from the unclosed MSWLF unit or all MSWLF units.

(g) The owner or operator of all MSWLF units must complete closure activities of each MSWLF unit or all MSWLF units in accordance with the closure plan within one hundred eighty days following the beginning of closure as specified in (f) of this subsection. Extensions of the closure period may be granted by the jurisdictional health department if the owner or operator demonstrates that closure will, of necessity, take longer than one hundred eighty days and he/she has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed MSWLF unit.

(h) Following closure of each MSWLF unit or all MSWLF units, the owner or operator must submit to the jurisdictional health department a certification or declaration of construction signed by an independent registered professional engineer verifying that closure has been completed in accordance with the approved final engineering plans and the closure plan.

(i) Notation on the deed.

(i) Following closure of all MSWLF units, the owner or operator must record a notation on the deed to the facility property, and send a copy of the notation as recorded to the jurisdictional health department.

(ii) The notation on the deed must in perpetuity notify any potential purchaser of the property that:

(A) The land has been used as a landfill facility; and

(B) Its use is restricted under subsection (2)(c)(iii) of this section.

(j) The owner or operator may request permission from the jurisdictional health department to remove the notation from the deed if all wastes (including any contaminated ground water and soils) are removed from the facility.

(2) Post-closure care requirements.

(a) Following closure of each MSWLF unit or all MSWLF units, the owner or operator must conduct post-closure care. Post-closure care must be conducted for thirty years, except as provided under (b) of this subsection and consist of at least the following:

(i) Maintaining the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, maintaining the vegetative cover (including cutting of vegetation when needed) or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;

(ii) Maintaining and operating the leachate collection system in accordance with the requirements in WAC 173-351-300 if applicable. The jurisdictional health department may recommend to the department and the department under its authority in chapter 90.48 RCW, the Water Pollution Control Act, may allow the owner or operator to stop managing leachate if the owner or operator demonstrates that leachate no longer poses a threat to human health and the environment;

(iii) Monitoring the ground water in accordance with the requirements of WAC 173-351-400, Ground water monitoring systems and corrective action and maintaining the ground water monitoring system, if applicable; and

(iv) Maintaining and operating the gas monitoring system in accordance with the requirements of WAC 173-351-200(4).

(b) The length of the post-closure care period may be:

(i) Decreased by the jurisdictional health department if the owner or operator demonstrates that the reduced period is sufficient to protect human health and the environment and this demonstration is approved by the jurisdictional health department; or

(ii) Increased by the jurisdictional health department if the jurisdictional health department determines that the lengthened period is necessary to protect human health and the environment.

(c) The owner or operator of all MSWLF units must prepare a written post-closure plan that is approved by the juris-

dictional health department during the permit process of Section 700 and that includes, at a minimum, the following information:

(i) A description of the monitoring and maintenance activities required in (a) of this subsection for each MSWLF unit or all MSWLF units, and the frequency at which these activities will be performed;

(ii) Name, address, and telephone number of the person or office to contact about the facility during the post-closure period; and

(iii) A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements of this regulation. The jurisdictional health department may approve any other disturbance if the owner or operator demonstrates that disturbance of the final cover, liner or other component of the containment system, including any removal of waste, will not increase the potential threat to human health or the environment.

(d) The owner or operator of existing MSWLF units must notify the jurisdictional health department that a post-closure plan has been prepared and placed in the operating record no later than the effective date of this regulation.

(e) Following completion of the post-closure care period for each MSWLF unit or all MSWLF units, the owner or operator must submit to the jurisdictional health department and the financial assurance trustee and/or insurer a certification or declaration of construction signed by an independent registered professional engineer verifying that post-closure has been completed in accordance with the post-closure plan.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-500, filed 10/26/93, effective 11/26/93.]

WAC 173-351-600 Financial assurance criteria. (1) Applicability and effective date.

(a) The requirements of this section apply to owners and operators of all MSWLF units.

(b) The requirements of this section are effective on the effective date of this rule, except as provided herein.

(2) Financial assurance for closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of hiring a third party to close the largest area of all MSWLF units ever requiring a final cover as required under WAC 173-351-500(1), Closure criteria, at any time during the active life in accordance with the closure plan. The owner or operator must place the detailed written estimate in the application for a permit under WAC 173-351-700 in order for the jurisdictional health department to determine whether a solid waste permit should be issued.

(i) The cost estimate must equal the cost of closing the largest area of the MSWLF unit or MSWLF units ever requiring a final cover at any time during the active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan see WAC 173-351-500 (1)(c)(ii).

(ii) During the active life of the MSWLF unit or MSWLF units, the owner or operator must annually adjust the closure cost estimate for inflation.

(iii) The owner or operator must increase the closure cost estimate and the amount of financial assurance provided under (b) of this subsection if changes to the closure plan or MSWLF unit conditions increase the maximum cost of closure at any time during the remaining active life.

(iv) The owner or operator may reduce the closure cost estimate and the amount of financial assurance provided under (b) of this subsection if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the MSWLF unit or all MSWL units. The owner or operator must submit justification for the reduction of the closure cost estimate and the amount of financial assurance to the jurisdictional health department for approval as a condition of the solid waste permit.

(b) The owner or operator of each MSWLF unit or all MSWLF units must establish financial assurance for closure of the MSWLF unit or all MSWLF units in compliance with WAC 173-351-600(5), Allowable mechanisms. The owner or operator must provide continuous coverage for closure until released from financial assurance requirements by demonstrating compliance with WAC 173-351-500 (1)(h) and (i).

(3) Financial assurance for post-closure care.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the MSWLF unit or all MSWLF units in compliance with the post-closure plan developed under WAC 173-351-500(2). The post-closure cost estimate used to demonstrate, during the permit process of WAC 173-351-700, financial assurance in (b) of this subsection must account for the total costs of conducting post-closure care, including annual and periodic costs as described in the post-closure plan over the entire post-closure care period. The owner or operator must place the detailed written estimate in the application for a permit under WAC 173-351-700 in order for the jurisdictional health department to determine whether a solid waste permit should be issued.

(i) The cost estimate for post-closure care must be based on the most expensive costs of post-closure care during the post-closure care period.

(ii) During the active life of the MSWLF unit or all MSWLF units and during the post-closure care period, the owner or operator must annually adjust the post-closure cost estimate for inflation.

(iii) The owner or operator must increase the post-closure care cost estimate and the amount of financial assurance provided under (b) of this subsection if changes in the post-closure plan or MSWLF unit conditions increase the maximum costs of post-closure care.

(iv) The owner or operator may reduce the post-closure cost estimate and the amount of financial assurance provided under (b) of this subsection if the cost estimate exceeds the maximum costs of post-closure care remaining over the post-closure care period. The owner or operator must submit justification for the reduction of the post-closure cost estimate and the amount of financial assurance to the jurisdictional health department for approval as a condition of the solid waste permit.

(b) The owner or operator of each MSWLF unit or all MSWLF units must establish, in a manner in accordance with subsection (5) of this section, financial assurance for the costs of post-closure care as required under WAC 173-351-500(2). The owner or operator must provide continuous coverage for post-closure care until released from financial assurance requirements for post-closure care by demonstrating compliance with WAC 173-351-500 (2)(e).

(4) Financial assurance for corrective action.

(a) An owner or operator of a MSWLF unit or all MSWLF units required to undertake a corrective action program under WAC 173-351-440(6) must have a detailed written estimate, in current dollars, of the cost of hiring a third party to perform the corrective action in accordance with the program required under WAC 173-351-440(6). The corrective action cost estimate must account for the total costs of corrective action activities as described in the corrective action plan for the entire corrective action period. The owner or operator must submit the corrective action cost estimate to the jurisdictional health department for approval.

(i) The owner or operator must annually adjust the estimate for inflation until the corrective action program is completed in accordance with WAC 173-351-440(6).

(ii) The owner or operator must increase the corrective action cost estimate and the amount of financial assurance provided under (b) of this subsection if changes in the corrective action program or MSWLF unit conditions increase the maximum costs of corrective action.

(iii) The owner or operator may reduce the amount of the corrective action cost estimate and the amount of financial assurance provided under (b) of this subsection if the cost estimate exceeds the maximum remaining costs of corrective action. The owner or operator must submit justification for the reduction of the corrective action cost estimate and the amount of financial assurance to the jurisdictional health department for approval.

(b) The owner or operator of each MSWLF unit or all MSWLF units required to undertake a corrective action program under WAC 173-351-440(6), must establish, in a manner in accordance with subsection (5) of this section, financial assurance for the most recent corrective action program. The owner or operator must provide continuous coverage for corrective action until released from financial assurance requirements for corrective action under the Model Toxics Control Act regulation, chapter 173-340 WAC.

(c) The requirements of this subsection become effective April 9, 1994.

(5) Allowable mechanisms. The mechanisms used to demonstrate financial assurance under WAC 173-351-600 must ensure that the funds necessary to meet the costs of closure, post-closure care, and corrective action for known releases will be available whenever they are needed. Except as otherwise provided herein, owners and operators of MSWLF units must use the financial mechanisms specified in (a) or (b) of this subsection.

(a) For MSWLF units owned or operated by municipal corporations, the closure, post-closure, and corrective action reserve account shall be handled in one of the following ways:

(i) Reserve account. Cash and investments accumulated and restricted for closure, post-closure, and corrective action for known releases with an equivalent amount of fund balance reserved in the fund accounting for solid waste activity; or

(ii) The cash and investments held in a nonexpendable trust fund as specified in (c) of this subsection.

(b) For MSWLF units owned by private disposal companies, the closure, post-closure, and corrective action for known releases financial assurance account shall be a trust account as spelled out in (c) of this subsection, except that established financial assurance accounts shall not constitute an asset of the facility owner or operator.

(c) Trust fund.

An owner or operator may satisfy the requirements of this section by establishing a trust fund which conforms to the requirements of (c)(i) through (xi) of this subsection.

(i) The trustee must be 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 owner or operator must place a copy of the trust agreement in the application for a permit under WAC 173-351-700 in order for the jurisdictional health department to determine whether a solid waste permit should be issued.

(ii) Payments into the trust fund must be made annually by the owner or operator over the duration (as defined in WAC 173-351-750) of the initial permit or over the remaining life of the MSWLF unit or all MSWLF units, whichever is shorter, in the case of a trust fund for closure or post-closure care, or over one-half of the estimated length of the corrective action program in the case of corrective action for known releases. This period is referred to as the pay-in period.

(iii) For a trust fund used to demonstrate financial assurance for closure and post-closure care, the first payment into each fund must be at least equal to the current cost estimate for closure or post-closure care, except as provided in (d) of this subsection, divided by the number of years in the pay-in period as defined in (c) of this subsection. The amount of subsequent payments must be determined by the following formula:

$$\textit{Next Payment} = \frac{CE\text{-}CV}{Y}$$

where CE is the current cost estimate for closure or post-closure care (updated for inflation or other changes), CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(iv) For a trust fund used to demonstrate financial assurance for corrective action, the first payment into the trust fund must be at least equal to one-half of the current cost estimate for corrective action, except as provided in (d) of this subsection, divided by the number of years in the corrective action pay-in period as defined in (c)(ii) of this subsection. The amount of subsequent payments must be determined by the following formula:

$$\textit{Next Payment} = \frac{RB\text{-}CV}{Y}$$

where RB is the most recent estimate of the required trust fund balance for corrective action (i.e., the total costs that will be incurred during the second half of the corrective action period), CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(v) The initial payment into the trust fund must be made before the initial receipt of waste or before the effective date of this section, whichever is later, in the case of closure and post-closure care, or no later than one hundred twenty days after the corrective action remedy has been selected in accordance with the requirements of WAC 173-351-480 (6) and (7).

(vi) If a municipal corporation owning or operating MSWLF units establishes a trust fund after having used cash and investments held in a nonexpendable reserve account specified in (a)(i) of this subsection, the initial payment into the trust fund must be at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to the specifications of this paragraph and (c) of this subsection as applicable.

(vii) The owner or operator, or other person authorized to conduct closure, post-closure care, or corrective action activities may request reimbursement from the trustee for these expenditures. Requests for reimbursement will be granted by the trustee only if:

(A) Sufficient funds are remaining in the trust fund to cover the remaining costs of closure, post-closure care, or corrective action;

(B) If justification and documentation of the cost is submitted to the jurisdictional health department for review and approval; and

(C) The owner or operator has a post-closure permit in effect according to WAC 173-351-730 (4)(c).

(viii) The trust fund may be terminated by the owner or operator only if:

(ix) In the case of a municipal corporation owning or operating MSWLF units, the municipal corporation substitutes a reserve account as specified in (a)(i) of this subsection; or

(x) Any owner or operator is no longer required to demonstrate financial responsibility in accordance with the requirements of subsection (2)(b), (3)(b), or (4)(b) of this section.

(d) Use of multiple financial mechanisms. A municipal corporation owning or operating MSWLF units may satisfy the requirements of this section by establishing more than one financial mechanism per facility. The mechanisms must be as specified in (a) and (b) of this subsection, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current cost estimate for closure, post-closure care or corrective action, whichever is applicable.

(e) For MSWLF units undergoing corrective action, allowable financial assurance mechanisms include:

(i) Any method approved by EPA under 40 CFR 258.74(f);

(ii) An interlocal agreement entered into under the Interlocal Cooperation Act, chapter 39.34 RCW, obligating the participating local governments to pay for the corrective action.

(f) The language of the mechanisms listed in (a) and (b) of this subsection must ensure that the instruments satisfy the following criteria:

(i) The financial assurance mechanisms must ensure that the amount of funds assured is sufficient to cover the costs of closure, post-closure care, and corrective action for known releases when needed;

(ii) The financial assurance mechanisms must ensure that funds will be available in a timely fashion when needed;

(iii) The financial assurance mechanisms must be obtained by the owner or operator by the effective date of these requirements or prior to the initial receipt of solid waste, whichever is later, in the case of closure and post-closure care, and no later than one hundred twenty days after the corrective action remedy has been selected in accordance with the requirements of WAC 173-351-460, until the owner or operator is released from the financial assurance requirements under subsection (2)(b), (3)(b), or (4)(b) of this section.

(g) The financial assurance mechanisms must be legally valid, binding, and enforceable under state and federal law.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-600, filed 10/26/93, effective 11/26/93.]

WAC 173-351-700 Permitting requirements. (1) WAC 173-351-700 through 173-351-750 shall constitute the permitting requirements of chapter 173-351 WAC, Criteria for municipal solid waste landfills. Except as provided for in subsection (5) of this section, no owner or operator shall construct, operate, close, or perform post-closure activity with respect to a facility except in conformance with a valid MSWLF permit issued pursuant to this chapter.

(2) Transition rules for existing MSWLF units. The following constitute the transition rules for this section:

(a) Existing MSWLF units with valid chapter 173-304 WAC permits expiring before the effective date of this chapter. Owners or operators of existing MSWLF units having valid permits expiring before the effective date of this chapter, must apply for a valid MSWLF permit no later than ninety days after promulgation of this regulation, to continue operation under the terms of this regulation. Each valid chapter 173-304 WAC permit expiring before the effective date of this chapter, is hereby continued until the valid MSWLF permit is issued under these rules. For these transition rules, the owner or operator shall prepare applications according to WAC 173-351-730(4), Reissuance/transition applications. Upon issuance of a valid MSWLF permit, the owner or operator must comply with the requirements of this regulation.

Note: MSWLF units that do not accept waste on or after the effective date of this chapter, and close under chapter 173-304 WAC, Minimum functional standards for solid waste handling, and the federal rules for closure under 40 CFR Part 258.60 would continue to be permitted under chapter 173-304 WAC unless such MSWLF units are part of a multi-unit ground water monitoring system according to WAC 173-351-450(4).

(b) Existing MSWLF units with valid chapter 173-304 WAC permits expiring on or after the effective date of this chapter. Each valid chapter 173-304 WAC permit (for exist-

ing MSWLF units) expiring on or after the effective date of this rule, is hereby continued until the expiration date set forth in the permit. Owners and operators must comply with the conditions of the permit and the regulations of chapter 173-304 WAC, in effect on October 8, 1993, for the duration of that permit. Owners or operators of existing MSWLF units with valid chapter 173-304 WAC permits expiring on or after the effective date of this chapter, must apply for a valid MSWLF permit no later than ninety days after promulgation of this regulation. For these transition rules, the owner or operator shall prepare applications according to WAC 173-351-730(4), Reissuance/transition applications. Upon issuance of a valid MSWLF permit, the owner or operator must comply with the requirements of this regulation.

Note: See also WAC 173-351-720 (6)(a), filing for reissuance.

(3) New and laterally expanded MSWLF units. New and laterally expanded MSWLF units receiving waste after the effective date of this chapter, shall meet the requirements of this section before construction has begun and before waste is accepted to the MSWLF unit or lateral expansion.

Note: Any owner or operator planning to incorporate a 50 percent increase or greater in design volume capacity not previously authorized in permit, or unpermitted changes resulting in significant adverse environmental impacts that have lead a responsible official to issue a declaration of significance under WAC 197-11-736 shall meet the requirements of this section before construction has begun and before waste is accepted to the MSWLF unit, or lateral expansion.

(4) Exemptions. The MSWLF units identified in this subsection are exempt from this section:

(a) MSWLF units that are excluded under WAC 173-351-010 (2)(b);

(b) Single family residences and single family farms dumping or depositing solid waste resulting from their own domestic, on-site activities onto or under the surface of land owned or leased by them when such action does not create a nuisance, violate any other statutes, ordinances, regulations, or this regulation, provided that such facilities:

(i) Are fenced or otherwise protected by natural barriers from unauthorized entry by the general public and large animal scavengers; and

(ii) Have placed a monthly soil cover to allow no visible solid waste.

(c) Corrective actions at a MSWLF unit 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), the Model Toxics Control Act or corrective actions taken by others to comply with a state and/or federal cleanup 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 facility or increase the amount of waste or contamination present at the facility;

(iii) The facility standards of WAC 173-351-300, 173-351-320, and 173-351-500 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.

Note: MSWLF units not covered under corrective action are not exempted from permitting under this section.

(5) Renewal required. The owner or operator of a facility shall apply for renewal of the facility's permit annually, except for that year that a permit has been or will be reissued under WAC 173-351-720(6).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-700, filed 10/26/93, effective 11/26/93.]

WAC 173-351-720 Permit application procedures. (1) Initial procedures.

(a) Forms and complete application. An application for any permit under this regulation must be submitted on a form prescribed by the department. In order to be determined complete:

(i) Two or more copies (as determined by the jurisdictional health department) of the application must have been signed by the owner and operator and received by the jurisdictional health department;

(ii) The application must include evidence of compliance with the State Environmental Policy Act (SEPA) rules, chapter 197-11 WAC; and

(iii) The application must include the plans, reports, and other supporting information required by this regulation.

(b) Notice. Once the jurisdictional health department determines that an application for a permit is factually complete, it shall:

(i) Refer one copy to the appropriate regional office of the department for review and comment;

(ii) For all permits except renewal, modified and transition permits give notice of its receipt of a proposed complete permit application to the public and to interested persons for public comment for thirty days after the publication date of the notice;

(iii) For all permits except renewal, modified and transition permits perform the following additional public notification requirements:

(A) Mail the notice to persons who have requested notice in writing;

(B) Mail the notice to state agencies and local governments with a regulatory interest in the proposal;

(C) Include in the public notice a statement that any person may express their views in writing to the jurisdictional health department within thirty days of the last date of publication;

(D) Mail a copy of the MSWLF permit decision to any person who has made written request for such decision; and

(E) Add the name of any person, upon request, to a mailing list to receive copies of notices for all applications, within the state or within a geographical area.

(c) Standards for approval. The jurisdictional health department shall investigate every application to determine whether the facility meets all applicable laws and regulations, conforms with the most recently adopted comprehensive solid waste management plan in effect at the time of application and complies with all zoning requirements. A land use permit or letter from the jurisdictional zoning authority shall be sufficient demonstration of compliance with zoning requirements.

(d) Fees. 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 account from which the jurisdictional health department's operating expenses are paid.

(e) Department's findings. 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 and when it expects its findings will be transmitted to the jurisdictional health department. Additionally, the department shall recommend for or against the issuance of each permit by the jurisdictional health department.

(f) Permit approval. When the jurisdictional health department has evaluated all information in the public record, it shall issue or deny 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 owner or operator shall be informed as to the status of the application with a schedule for final determination.

(g) Permit format. 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 facility including the requirement that final engineering plans and specifications be submitted for approval to the jurisdictional health department.

(h) Filing permits with the department. The jurisdictional health department shall mail all issued permits to the department no more than seven days after the date of issuance. The department shall review and may appeal the permit as set forth in RCW 70.95.185 and 70.95.190.

(i) Renewal procedures. The owner or operator of a facility shall apply for renewal of the MSWLF permit annually, except for that year that a permit has been or will be reissued under subsection (6) of this section. The owner or operator is authorized to continue all activities authorized under the currently expired permit, if the jurisdictional health department has not rendered a decision on renewal by the yearly renewal date of the current permit. The jurisdictional health department shall annually:

(A) Review the original application and such additional information as required in WAC 173-351-730 (3)(b) for compliance with these regulations:

(B) Collect the renewal fee if the jurisdictional health department so chooses;

(C) If the requirements of (b)(i)(A) of this subsection are met, renew the permit; and

(D) File the renewed permit with the department no more than seven days after the date of renewal. The department shall review and may appeal the renewal as set forth in RCW 70.95.185 and 70.95.190. See also reissuance under subsection (6) of this section.

(2) SEPA review. The State Environmental Policy Act (SEPA), the SEPA rules and the local SEPA rules apply to permit decisions made pursuant to this chapter.

(3) Preapplication meetings. Preapplication meetings between the jurisdictional health department and the owner or operator are encouraged to address, among other things, the development of a complete application pertaining to the owner's or operator's prospective project.

(4) Activities authorized in permits, generally.

(a) Construction. Issuance of a valid MSWLF permit entitles the permittee to construct the MSWLF unit or MSWLF units, subject to any appropriate conditions the jurisdictional health department may impose. If the facility is to be constructed in several or more MSWLF units, the initial application must contain the conceptual design for the entire facility and the information of WAC 173-351-730 (1)(b) for the initial MSWLF unit. In addition, information of WAC 173-351-730 (1)(b) may be submitted covering all other MSWLF units that will be constructed up to the first ten years of facility operation. The permit will identify the extent of each permitted MSWLF unit and the specific time frames for the first MSWLF unit and estimated time frames for subsequent MSWLF units within which construction activities must begin and end for each MSWLF unit. Authorization to construct each subsequent MSWLF unit must, as to that MSWLF unit, contain the detailed construction plans as specified in this regulation, and those plans and the construction of that MSWLF unit must comply with all requirements of the SEPA and of this regulation and other regulations applicable at the time jurisdictional health department approval is granted.

(b) Operation. Except for MSWLF units governed by the transition rules of WAC 173-351-700(2), the jurisdictional health department's approval to accept solid waste will not be given until the permittee has demonstrated to the jurisdictional health department's satisfaction that the MSWLF unit has been constructed in accordance with the approved plans and specifications for that MSWLF unit. If a facility is to be constructed in several or more MSWLF units, the jurisdictional health department must determine that each specific MSWLF unit has been constructed in accordance with the approved permit before operation will be permitted in that specific MSWLF unit.

(c) Post-closure activities. The jurisdictional health department's approval for post-closure activities will not be given until the permittee has demonstrated to the jurisdictional health department's satisfaction that the MSWLF unit or all the MSWLF units have been closed in accordance with the final engineering plans WAC 173-351-500 (1)(e)(ii) and the approved closure plan.

Note: Failure to obtain approval for post-closure activities may prevent reimbursement under post-closure financial assurance in WAC 173-351-600.

(5) Permit modifications.

(a) Any owner or operator intending to modify a valid MSWLF permit must file a modification application at least thirty days before the intended modification. A modification application must be made on forms authorized by the jurisdictional health department and the department, and the forms must include information identified in WAC 173-351-730 (3)(a).

(b) The jurisdictional health department shall follow the procedures of subsection (1) of this section in issuing a permit modification except for the following:

(i) Subsection (1)(b)(ii) and (iii) of this section, public notice; and

(ii) Subsection (1)(i) of this section, renewal procedures.

(c) In order to allow for permit modifications to be authorized at the time of permit renewal, any owner or operator may combine the application required for a permit modification in WAC 173-351-730 (3)(a) with the application required for a renewal permit in WAC 173-351-730 (3)(b), at the time of permit renewal.

(6) Permit reissuance. Except for permits during transition under subsection (2) of this section, any owner or operator intending to continue construction, operation or post-closure beyond the permitted duration of a valid MSWLF permit must file a reissuance application at least ninety days before the existing permit expires. Reissuance applications are subject to the public notification process of subsection (1)(b) of this section. A reissuance application must be made on forms authorized by the jurisdictional health department and the department, and must include information identified in WAC 173-351-730(4).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-720, filed 10/26/93, effective 11/26/93.]

WAC 173-351-730 Contents of applications. (1) Applications for MSWLF permits and level of detail, generally.

(a) General requirements for MSWLF permit applications and level of detail.

(i) An application for an MSWLF permit to construct, operate, and conduct post-closure activities at a facility must include all applicable information identified in this section pertaining to the facility for which the permit is being sought.

(ii) The information in every application submitted under this regulation must be of sufficient detail so as to allow the jurisdictional health department to fulfill its responsibilities under SEPA and this regulation by:

(A) Having detail sufficient to be readily understood by the persons using the documents contained in the application to enable them to determine how the facility will be constructed, operated, and closed and how it will be monitored and maintained after closure;

(B) Providing the jurisdictional health department with sufficient detail to ascertain the environmental impact of the proposed project; and

(C) Providing sufficient detail to demonstrate that the location, design, construction, operation, closure, and post-closure monitoring and maintenance of the MSWLF will be capable of compliance with the applicable requirements of this regulation.

(b) Specific requirements for permit applications. In addition to other requirements set forth in this section, complete applications for MSWLF permits must contain the following:

(i) Engineering plans that set forth the proposed facility's location, property boundaries, adjacent land uses, and detailed construction plans pursuant to subsection (5)(a) of this section;

(ii) How the facility will meet the location standards of WAC 173-351-130 and 173-351-140 including demonstrations;

(iii) A hydrogeologic report and water quality monitoring plan prepared in accordance with the provisions of WAC 173-351-400 (including all demonstrations);

(iv) The plan of operation that prescribes how the facility will fulfill the operating requirements set forth in WAC 173-351-200, 173-351-210, and 173-351-220, including the demonstrations of this regulation;

(v) An engineering report comprehensively describing the existing site conditions and an analysis of the facility, including closure, post-closure criteria, and any necessary demonstrations with subsection (5)(b) of this section;

(vi) A construction quality assurance and quality control plan prepared in accordance with subsection (6) of this section;

(vii) The closure and post-closure plans required by WAC 173-351-500, including the schedule of WAC 173-351-500 (1)(c)(iv) and for the submission of final engineering plans for closure six months prior to closure of the facility or the MSWLF unit. See WAC 173-351-500 (1)(e)(ii);

(viii) Either a legal document (contract, local permit, a signed permit application etc.) certifying acceptance of leachate by the operator of a wastewater treatment facility for the discharge of leachate to that facility, or an application for a National Discharge Elimination System (NPDES) permit pursuant to chapter 173-220 WAC or a state discharge permit (for solar evaporation ponds having no surface water discharge) pursuant to chapter 173-216 WAC or other necessary environmental permit applications (including air quality permit applications) for otherwise managing leachate;

(ix) For small landfills, the demonstration of WAC 173-351-010 (2)(c);

(x) A demonstration of how the MSWLF conforms with the approved local comprehensive solid waste management plan in place at the time of application.

(2) Combined applications. Owners or operators may file a combined application for MSWLF units and other solid waste handling facilities, such as surface impoundments, composting facilities, storage piles, and MSWLF units closed under and/or regulated by chapter 173-304 WAC, Minimum functional standards for solid waste handling or other rules promulgated under the authority of chapter 70.95 RCW, including this regulation. The combined application must contain information required by each applicable regulation.

(3) Modification and renewal applications.

(a) Modification applications. An application on forms specified by the jurisdictional health department and the department to modify a valid MSWLF permit issued pursuant to WAC 173-351-700 must include, and address, the following at a minimum:

(i) A description of the proposed modification;

(ii) The reasons for the proposed modification;

(iii) A description of the impacts from the proposed modification upon the MSWLF unit or the facility as presently permitted; and

(iv) A showing that, as modified, the MSWLF unit will be capable of compliance with the applicable requirements of this regulation.

(b) Renewal applications. An application on forms specified by the jurisdictional health department and the depart-

ment to renew a permit issued pursuant to WAC 173-351-700 must include and address the following at a minimum:

(i) Any changes in operating methods, closure cost or post-closure costs or other changes not falling under the definition of a permit modification;

(ii) Any changes as revealed by inspections, or complaints;

(iii) Evidence that the annual report of WAC 173-351-200(11) has been submitted;

(iv) A list of documents added to the operating record according to WAC 173-351-200(10); and

(v) Evidence that all MSWLF unit operators have continued to comply with the certification requirements of chapter 173-300 WAC, Certification of operators of solid waste incinerator and landfill facilities.

(4) Reissuance/transition applications. An application to reissue a permit previously issued pursuant to this regulation or to convert a chapter 173-304 WAC permit to a valid MSWLF permit under the transition permit rules of WAC 173-351-700(2) must, at a minimum, include and address the following:

(a) Review the original application and permit for compliance with these regulations and submit such additional information as follows:

(i) A compliance summary showing how the facility's construction, operation, closure and post-closure activities, as applicable, have been undertaken either in compliance or not in compliance with the terms and conditions of the expiring permit;

(ii) Specifying any changes proposed by the owner or operator to, and detailing any changes in circumstance that may affect, the design, construction, operation, closure, or post-closure care of the facility and describing how compliance with the applicable requirements of this regulation will be assured.

(b) Review of information collected from inspections, complaints, or known changes in the operations including:

(i) Results of ground water monitoring taken during the operation (including closure/post-closure) of the facility according to WAC 173-351-400 or 173-304-490 as appropriate; and

(ii) Results of surface water and methane monitoring taken during the operation (including closure/post-closure) of the facility.

(5) Engineering plans, reports, and specifications. Unless otherwise specified in chapter 173-351 WAC, all engineering plans, reports, and specifications must comply with the requirements of this subsection. Engineering plans, reports, specifications, programs, and manuals submitted to the jurisdictional health department must be prepared and certified by an individual licensed in engineering disciplines associated with landfill design and construction or with experience in landfill design and construction and to practice engineering in the state of Washington.

(a) Engineering plans. Unless otherwise specified in this chapter, the engineering plans for all MSWLF units must be submitted using the following format:

(i) The sheet size with title blocks must be twenty-two inches by thirty-four inches or twenty-four inches by thirty-six inches.

(ii) The cover sheet must include the project title, owner's and operator's name, sheet index, legend of symbols, and the engineer's name, address, signature, date of signature, and seal.

(iii) The preliminary engineering plans relating the project to its environmental setting must include:

(A) A regional plan or map (having a minimum scale of 1:62,500) and indicate directions and distances to airports within five miles (eight kilometers) of the facility;

(B) A vicinity plan or map (having a minimum scale of 1:24,000) that must show the area within one mile (1.6 kilometers) of the property boundaries of the facility in terms of, the existing and proposed zoning and land uses within that area; and residences, public and private water supply wells, known private water supply aquifers, sole source aquifers, ground water management areas, well-head protection zones, special protection areas and surface waters (with quality classifications), access roads, bridges, railroads, airports, historic sites, and other existing and proposed man-made or natural features relating to the facility; and

(C) An overall site plan (having a minimum scale of 1:2,400 with five foot (or one meter) minimum contour intervals) that must show the landfill's property boundaries (as certified by an individual licensed to practice land surveying in the state of Washington), offsite and onsite utilities (such as electric, gas, water, storm, and sanitary sewer systems) and right-of-way easements; the 100-year floodplain, wetlands, Holocene faults, unstable areas; the names and addresses of contiguous property owners; the location of soil borings, excavations, test pits, gas venting structures, wells (including down-gradient drinking water supply wells within two thousand feet (six hundred ten meters) of the property boundary), lysimeters, piezometers, environmental and facility monitoring points and devices (with each identified in accordance with a numbering system acceptable to the jurisdictional health department and whose horizontal location are accurate to the nearest 0.5 foot (0.15 meter) and all orthometric evaluations should be related to a vertical benchmark based on the national geodetic vertical datum of 1929 (NGVD29) and be established to 3rd order classification standards per federal geodetic control committee, or its successor, as specified in WAC 332-130-060 as measured from the ground surface and top of well casing), benchmarks and permanent survey markers, and onsite buildings and appurtenances, fences, gates, roads, parking areas, drainage culverts, and signs; the delineation of the total landfill area including planned staged development of the landfill's construction and operation, and the lateral and vertical limits of previously filled areas; the location and identification of the sources of cover materials; the location and identification of special waste handling areas; a wind rose; and site topography with five foot (or one meter) minimum contour intervals.

Note: All horizontal locations shall be based upon a control station related to a horizontal datum specified in chapter 58.20 RCW and chapter 332-130 WAC (NAD.83 (1991)).

(D) Detailed plans of the landfill must clearly show in plan and cross-sectional views, the original, undeveloped site topography before excavation or placement of solid waste; the existing site topography (if different from the original, undeveloped site topography) including the location and

approximate thickness and nature of any existing solid waste; the seasonal high ground water table; generalized geologic units; known and interpolated bedrock elevations; the proposed limits of excavation and waste placement; the location and placement of each liner system and of each leachate collection system, locating and showing all critical grades and elevations of the collection pipe inverts and drainage envelopes, manholes, cleanouts, valves, sumps, and drainage blanket thicknesses; all berms, dikes, ditches, swales and other devices as needed to divert or collect surface water runon or runoff; the final elevations and grades of the landfill cover system including the grading and gas venting layer, low permeability barrier, topsoil layers; the system used for monitoring and venting the decomposition gases generated within the landfill; ground water monitoring wells; geophysical and geochemical monitoring devices or structures; leachate storage, treatment and disposal systems including the collection network, sedimentation ponds and any treatment, pretreatment, or storage facilities; typical roadway sections, indicating the pavement type, dimensions, slopes and profiles; the building floor plans, elevations, appurtenances; and plans detailing the landfill entrance area including gates, fences, and signs.

(b) Engineering reports. The engineering reports for a facility must:

(i) Contain a cover sheet, stating the project title and location, the owner's or operator's name, and the engineer's name, address, signature, date of signature, and seal.

(ii) Have its text printed on 8 1/2" by 11" pages (paginated consecutively);

(iii) Contain a table of contents or index describing the body of the report and the appendices;

(iv) Include a body of report whose content is described by (c) of this subsection; and

(v) Include all appendices.

(c) An engineering report containing a description of the existing site conditions and, at a minimum, an analysis of the proposed facility that must:

(i) Describe current operating practices, expected life and any pending litigation or corrective actions relating to the existing or past facilities;

(ii) Specify the proposed design capacity of the MSWLF unit for which approval is being sought, describing the number, types, and the minimum specifications of all the necessary machinery and equipment needed to effectively operate the landfill at the proposed design capacity;

(iii) Contain a site analysis of the proposed action including:

(A) The location of the closest population centers;

(B) A comprehensive description of the primary transportation systems and routes in the facility service area (i.e., highways, airports, railways, etc.);

(C) An analysis of the existing topography, surface water and subsurface geological conditions in accordance with the hydrogeologic report requirements of WAC 173-351-490;

(D) A description of the materials and construction methods used for the placement of each monitoring well pursuant to the requirements of WAC 173-351-400; all gas venting systems; each liner and leachate collection and removal system; leachate storage, treatment, and disposal systems; and cover systems to demonstrate conformance with the design requirements found in WAC 173-351-300, 173-351-320, and 173-351-500. This description also must include a discussion of provisions to be taken to prevent frost action upon each liner system in areas where refuse has not been placed;

(E) An estimate of the expected quantity of leachate to be generated, including:

(I) An annual water budget that estimates leachate generation quantities during initial operation, upon application of intermediate cover, and following MSWLF unit or all MSWLF units closure. At a minimum, the following factors must be considered in the preparation of the water budget to determine the amount of leachate generated as a result of precipitation infiltration into the MSWLF unit or all the MSWLF units: Average monthly temperature, average monthly precipitation, evaporation, evapotranspiration which considers the vegetation type and root zone depth, surface/cover soil conditions and their relation to precipitation runoff which must account for the surface conditions and soil moisture holding capacity and all other sources of moisture contribution to the landfill;

(II) Liner and leachate collection system efficiencies that must be calculated using an appropriate analytical or numerical assessment. The factors to be considered in the calculation of collection system efficiency must include, at a minimum, the saturated hydraulic conductivity of the liner, the liner thickness, the saturated hydraulic conductivity of the leachate collection system, the leachate collection system porosity, the base slope of the liner and leachate collection and removal system interface, the maximum flow distance across the liner and leachate collection and removal system interface to the nearest leachate collection pipe, the estimated leachate generation quantity as computed in accordance with the requirements of (c)(iii)(E)(I) of this subsection; and

(III) Predictions of the static head of leachate on the liners, volume of leachate to be collected, and the volume of leachate that may permeate through the entire liner system, all on a monthly basis. Information gained from the collection efficiency calculations required in (c)(iii)(E)(I) and (II) of this subsection must be used to make these predictions. This assessment also must address the amount of leachate expected to pass through the liner system in gallons per acre per day (liters per square meter per day).

(d) Discuss the closure and post-closure maintenance and operation of the facility which must include, but not be limited to:

(i) A closure design consistent with the requirements of WAC 173-351-500;

(ii) A post-closure water quality monitoring program consistent with the requirements of WAC 173-351-400 and 173-351-500;

(iii) An operation and closure plan for the leachate collection, treatment, and storage facilities consistent with the requirements of this regulation and WAC 173-304-430; and

(iv) A discussion of the future use of the facility, including the specific proposed or alternative uses during the post-closure period. Future uses must not adversely affect the final cover system. See WAC 173-351-500 (2)(c)(iii).

(e) Appendices submitted as part of an engineering report submitted with an application to construct a new or laterally expanded MSWLF unit must contain:

(i) Appropriate charts and graphs;

(ii) Copies of record forms used at the MSWLF unit;

(iii) Test pit logs, soil boring logs, and geological information (such as stratigraphic sections, geophysical and geochemical surveys, and water quality analyses);

(iv) Engineering calculations (including the raw data from which they were made);

(v) Other supporting data, including literature citations.

(6) Construction quality assurance and construction quality control plans.

The construction quality assurance (QA) and construction quality control (QC) plan must address the construction of the MSWLF unit according to the designs set forth in chapter 173-351 WAC. (Construction QA and construction QC are defined in WAC 173-351-100.) The owner or operator may submit separate construction QA plans and construction QC plans. For each specified phase of construction, these plans must include, but not be limited to:

(a) A delineation of the responsibilities for the QA management organization and the QC management organization, including the chain of command of the QA inspectors and contractors and the QC inspectors and contractors; quality assurance shall be performed by a third party organization that is independent of the landfill owner/operator/contractor.

(b) A description of the required level of experience and training for the contractor, his/her crew, and QA and QC inspectors for every major phase of construction in sufficient detail to demonstrate that the approved installation methods and procedures will be properly implemented; and

(c) A description of the QA and QC testing protocols for every major phase of construction, which must include, at a minimum, the frequency of inspection, field testing, sampling for laboratory testing, the sampling and field testing procedures and equipment to be utilized, the calibration of field testing equipment, the frequency of performance audits, the sampling size, the laboratory procedures to be utilized, the calibration of laboratory equipment and QA/QC of laboratory procedures, the limits for test failure, and a description of the corrective procedures to be used upon test failure.

Note: It is intended that owners or operators will select and pay for the independent third party construction quality assurance firm, who will report to the owner or operator.

(7) Signature and verification of applications.

(a) All applications for permits must be accompanied by evidence of authority to sign the application and must be signed by the owner or operator as follows:

(i) In the case of corporations, by a duly authorized principal executive officer of at least the level of vice-president; in the case of a partnership or limited partnership, by:

(ii) A general partner;

(iii) Proprietor; or

(iv) In the case of a sole proprietorship, by the proprietor;

(v) In the case of a municipal, state, or other governmental entity, by a duly authorized principal executive officer or elected official.

(b) Applications must be sworn to by, or on behalf of, the owner or operator, in respect to the veracity all statements therein; or must bear an executed statement by, or on behalf of, the owner or operator to the effect that false statements made therein are made under penalty of perjury.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-730, filed 10/26/93, effective 11/26/93.]

WAC 173-351-740 Permit issuance criteria. The jurisdictional health department may issue, reissue, or modify a MSWLF permit to a facility, only if:

(1) The application's engineering and hydrogeological data and construction plans and specifications required by this regulation pertaining to such a MSWLF unit or MSWLF units substantiate that the proposed MSWLF unit or MSWLF units meets the requirements of this regulation;

(2) The application demonstrates the facility's ability to operate and close in accordance with the requirements of this regulation;

(3) The application demonstrates the facility's ability to conduct post-closure activities in accordance with the requirements of this regulation; and a form of surety or financial responsibility for post-closure activities has been filed with the jurisdictional health department; and

(4) The application demonstrates the facility's consistency with the local solid waste management plan in effect at the time of application.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-740, filed 10/26/93, effective 11/26/93.]

WAC 173-351-750 Permit provisions. (1) Mitigation of adverse impacts. The jurisdictional health department may impose conditions in each permit, to assure mitigation of adverse environmental impacts pursuant to SEPA, chapter 43.21C RCW and to insure compliance with the requirements identified in WAC 173-351-130 through 173-351-600, with the applicable sections pertaining to such a MSWLF unit or all MSWLF units, and with other applicable laws and regulations.

(2) Transferability.

(a) All permits issued pursuant to this regulation are transferable only upon prior written approval of the jurisdictional health department and a demonstration that the prospective transferee will be able to comply with applicable laws and regulations, permit conditions, and other requirements to which the prospective transferor is subject.

(b) Upon transfer of ownership of all or part of a facility, a provision must be included in the property deed indicating the period of time during which the facility has been disposing of solid waste, a description of the solid waste contained within, and the fact that the records for the facility have been filed with the jurisdictional health department. The deed also must reference a map, which must be filed with the county clerk, showing the limits of the active areas as defined in WAC 173-351-100.

(3) Duration of permits. The jurisdictional health department must specify the duration of the MSWLF permit not to exceed ten years. Permits must be renewed annually according to WAC 173-351-730(3), and reissued according to WAC 173-351-720(6).

(4) Preconstruction review condition. The jurisdictional health department shall include in each permit for a new

MSWLF unit or lateral expansion a condition requiring the owner or operator, to submit the following documents sixty days prior to beginning construction, and to obtain the jurisdictional health department's approval that the following documents conform with the engineering report and with the requirements of this chapter:

(a) Final design drawings;

(b) Construction specifications; and

(c) A construction quality assurance manual for the following MSWLF components:

(i) Bottom liner;

(ii) Leachate collection and removal system;

(iii) Landfill gas control system;

(iv) Leachate and landfill gas condensate treatment and disposal system; and

(v) Final cover system.

(5) Supervision and certification or declaration of construction. The construction of a MSWLF unit must be undertaken:

(a) Under the supervision of an individual licensed to practice engineering in the state of Washington; and

(b) In conformance with the construction quality assurance plan of WAC 173-351-730(6).

(6) Preoperation review conditions. Each permit issued under this chapter for a new MSWLF unit or lateral expansion shall contain a condition requiring that upon completion of construction, the licensed engineered who supervised construction shall certify or declare in writing that the construction is in accordance with the terms of the applicable permit and tested in accordance with construction quality assurance plans of WAC 173-351-730(6). Except as specified elsewhere in this regulation, this certification or declaration must be submitted to the jurisdictional health department within three months after completion of construction and must include recorded construction drawings and specifications. The operator must notify the jurisdictional health department, in writing, of the date when solid waste will be first received at the MSWLF unit.

(7) Cessation of construction or operation activities. If construction or operation activities started under a permit issued pursuant to this chapter cease for a period of twelve consecutive months, the jurisdictional health department may in its discretion revoke the permit. The jurisdictional health department shall provide notice to the owner or operator in writing explaining the reasons for revocation. The jurisdictional health department shall not revoke a permit where the cessation of construction or operation is caused by factors beyond the reasonable control of the permittee or when such cessation is in accordance with the provisions of the permit.

(8) Design volume capacity. Every MSWLF permit must set forth the facility's approved design volume capacity.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-750, filed 10/26/93, effective 11/26/93.]

WAC 173-351-760 Appeals. Whenever the jurisdictional health department denies a permit or suspends a permit for a solid waste disposal site, it shall, upon request of the application or holder of the permit, grant a hearing on such denial or suspension within thirty days after the request therefor is made. Notice of the hearing shall be given to all interested parties including the county or city having jurisdiction over the site and the department. Within thirty days after the hearing the health officer shall notify the applicant or the holder of the permit in writing of his determination thereof. Any party aggrieved by such determination may appeal to the pollution control hearings board by filing with the hearings board a notice of appeal within thirty days after receipt of notice of the determination of the health officer. The hearings board shall hold a hearing in accordance with the provisions of the Administrative Procedure Act, chapter 34.05 RCW, as now or hereafter amended.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-760, filed 10/26/93, effective 11/26/93.]

WAC 173-351-990 Appendices.

APPENDIX I[1]

Appendix I - Constituents for Detection Monitoring

	COMMON NAME[2]	CAS RN[3]
Inorganic Constituents		
1)	Antimony	(Dissolved)
2)	Arsenic	(Dissolved)
3)	Barium	(Dissolved)
4)	Beryllium	(Dissolved)
5)	Cadmium	(Dissolved)
6)	Chromium	(Dissolved)
7)	Cobalt	(Dissolved)
8)	Copper	(Dissolved)
9)	Lead	(Dissolved)
10)	Nickel	(Dissolved)
11)	Selenium	(Dissolved)
12)	Silver	(Dissolved)
13)	Thallium	(Dissolved)
14)	Vanadium	(Dissolved)
15)	Zinc	(Dissolved)
16)	Nitrate	
Organic Constituents		
17)	Acetone	67-64-1
18)	Acrylonitrile	107-13-1
19)	Benzene	71-43-2
20)	Bromochloromethane	74-97-5
21)	Bromodichloromethane	75-27-4
22)	Bromoform; Tribromomethane	75-25-2
23)	Carbon disulfide	75-15-0
24)	Carbon tetrachloride	56-23-5
25)	Chlorobenzene	108-90-7
26)	Chloroethane; Ethyl chloride	75-00-3
27)	Chloroform; Trichloromethane	67-66-3
28)	Dibromochloromethane; Chlorodibromomethane	124-48-1
29)	1,2-Dibromo-3-chloropropane; DBCP	96-12-8
30)	1,2-Dibromoethane; Ethylene dibromide; EDB	106-93-4
31)	o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1
32)	p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7
33)	trans-1,4-Dichloro-2-butene	110-57-6

	COMMON NAME[2]	CAS RN[3]
Inorganic Constituents		
34)	1,1-Dichloroethane; Ethylidene chloride	75-34-3
35)	1,2-Dichloroethane; Ethylene dichloride	107-06-2
36)	1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride	75-35-4
37)	cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene	156-59-2
38)	trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene	156-60-5
39)	1,2-Dichloropropane; Propylene dichloride	78-87-5
40)	cis-1,3-Dichloropropene	10061-01-5
41)	trans-1,3-Dichloropropene	10061-02-6
42)	Ethylbenzene	100-41-4
43)	2-Hexanone; Methyl butyl ketone	591-73-6
44)	Methyl bromide; Bromomethane	74-83-9
45)	Methyl chloride; Chloromethane	74-87-3
46)	Methylene bromide; Dibromomethane	74-95-3
47)	Methylene chloride; Dichloromethane	75-09-2
48)	Methyl ethyl ketone; MEK; 2-Butanone	78-93-3
49)	Methyl iodide; Iodomethane	74-88-4
50)	4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1
51)	Styrene	100-42-5
52)	1,1,1,2-Tetrachloroethane	630-20-6
53)	1,1,2,2-Tetrachloroethane	79-34-5
54)	Tetrachloroethylene; Tetrachloroethene; Perchloroethylene	127-18-4
55)	Toluene	108-88-3
56)	1,1,1-Trichloroethane; Methyl chloroform	71-55-6
57)	1,1,2-Trichloroethane	79-00-5
Inorganic Constituents		
58)	Trichloroethylene; Trichloroethene	79-01-6
59)	Trichlorofluoromethane; CFC-11	75-69-4
60)	1,2,3-Trichloropropane	96-18-4
61)	Vinyl acetate	108-05-4
62)	vinyl chloride	75-01-4
63)	Xylenes	1330-20-7

[1] This list contains 47 volatile organics for which possible analytical procedures provided in EPA Report SW-846 "Test Methods for Evaluating Solid Waste," third edition, November 1986, as revised December 1987, includes Method 8260; and 15 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods.

[2] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3] Chemical Abstracts Service registry number.

APPENDIX II
GROUND WATER QUALITY PARAMETERS

Field Parameters

pH
specific conductance
temperature
static water level

Geochemical Indicator Parameters

Calcium (Ca)	Sodium (Na)
Bicarbonate (HCO_3)	Chloride (Cl)
Magnesium (Mg)	Potassium (K)
Sulfate (SO_4)	Alkalinity (as Ca CO_3)
	Iron (Fe)
	Manganese (Mn)

Leachate Indicators

Ammonia (NH_3-N)
Total Organic Carbon (TOC)
Total Dissolved Solids (TDS)

APPENDIX III
List of Hazardous Inorganic and Organic Constituents.[1]

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-	8100	200
			8270	10
Acenaphthylene	208-96-8	Acenaphthylene	8100	200
			8270	10
Acetone	67-64-1	2-Propanone	8260	100
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015	100
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270	10
2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-	8270	20
Acrolein	107-02-8	2-Propenal	8030	5
			8260	100
Acrylonitrile	107-13-1	2-Propenenitrile	8030	5
			8260	200
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4, 4a,5,8,8a-hexahydro- (1α,4α, 4aβ,5α,8α,8aβ)-	8080	0.05
			8270	10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010	5
			8260	10
4-Aminobiphenyl	92-67-1	[1,1 1 -Biphenyl]-4-amine	8270	20
Anthracene	120-12-7	Anthracene	8100	200
			8270	10
Antimony	(Dissolved)	Antimony	6010	300
			7040	2000
			7041	30
Arsenic	(Dissolved)	Arsenic	6010	500
			7060	10
			7061	20
Barium	(Dissolved)	Barium	6010	20
			7080	1000
Benzene	71-43-2	Benzene	8020	2
			8021	0.1
			8260	5
Benzo[a]anthracene; Benzanthracene	56-55-3	Benz[a]anthracene	8100	200
			8270	10
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene	8100	200
			8270	10
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene	8100	200
			8270	10
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene	8100	200
			8270	10
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene	8100	200
			8270	10
Benzyl alcohol	100-51-6	Benzenemethanol	8270	20
Beryllium	(Dissolved)	Beryllium	6010	3
			7090	50
			7091	2
alpha-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5β,6β)-	8080	0.05
			8270	10
beta-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2β,3α,4β,5α,6β)-	8080	0.05
			8270	20
delta-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3α,4β,5α,6β)-	8080	0.1
			8270	20
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)-	8080	0.05
			8270	20
Bis(2-chloroethoxy)methane	111-91-1	Ethane, 1,1 1 -[methylenebis(oxy)]bis[2-chloro-	8110	5
			8270	10
Bis(2-chloroethyl) ether; Dichloroethyl ether	111-44-4	Ethane, 1,1 1 -oxybis[2-chloro-	8110	3
			8270	10
Bis-(2-chloro-1-methylethyl) ether; 2,2 1 -Dichlorodiisopropyl ether; DCIP, See note 7	108-60-1	Propane, 2,2 1 -oxybis[1-chloro-	8110	10
			8270	10
Bis(2-ethylhexyl) phthalate	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	8060	20
Bromochloromethane; Chlorobromomethane	74-97-5	Methane, bromochloro-	8021	0.1
			8260	5
Bromodichloromethane; Dibromochloromethane	75-27-4	Methane, bromodichloro-	8010	1
			8021	0.2
			8260	5
Bromoform; Tribromomethane	75-25-2	Methane, tribromo-	8010	2
			8021	15
			8260	5
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-	8110	25
			8270	10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	8060 8270	5 10
Cadmium	(Dissolved)	Cadmium	6010 7130 7131	40 50 1
Carbon disulfide	75-15-0	Carbon disulfide	8260	100
Carbon tetrachloride	56-23-5	Methane, tetrachloro-	8010 8021 8260	1 0.1 10
Chlordane	See Note 8	4,7-Methano-1H-indene, 1,2,4,5, 6,7,8,8-octachloro-2,3,3a,4,7, 7a-hexahydro-	8080 8270	0.1 50
p-Chloroaniline	106-47-8	Benzenamine, 4-chloro-	8270	20
Chlorobenzene	108-90-7	Benzene, chloro-	8010 8020 8021 8260	2 2 0.1 5
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	8270	10
p-Chloro-m-cresol; 4-Chloro-3-methylphenol	59-50-7	Phenol, 4-chloro-3-methyl-	8040 8270	5 20
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-	8010 8021 8260	5 1 10
Chloroform; Trichloromethane	67-66-3	Methane, trichloro-	8010 8021 8260	0.5 0.2 5
2-Chloronaphthalene	91-58-7	Naphthalene, 2-chloro-	8120 8270	10 10
2-Chlorophenol	95-57-8	Phenol, 2-chloro-	8040 8270	5 10
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-	8110 8270	40 10
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-	8010 8260	50 20
Chromium	(Dissolved)	Chromium	6010 7190 7191	70 500 10
Chrysene	218-01-9	Chrysene	8100 8270	200 10
Cobalt	(Dissolved)	Cobalt	6010 7200 7201	70 500 10
Copper	(Dissolved)	Copper	6010 7210 7211	60 200 10
m-Cresol; 3-methylphenol	108-39-4	Phenol, 3-methyl-	8270	10
o-Cresol; 2-methylphenol	95-48-7	Phenol, 2-methyl-	8270	10
p-Cresol; 4-methylphenol	106-44-5	Phenol, 4-methyl-	8270	10
Cyanide	57-12-5	Cyanide	9010	200
2,4-D; 2,4-Dichlorophenoxyacetic acid	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-	8150	10
4,4 1 -DDD	72-54-8	Benzene 1,1 1 -(2,2-dichloroethylidene)bis[4-chloro-	8080 8270	0.1 10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
4,4 1 -DDE	72-55-9	Benzene, 1,1 1 -(dichloroethyenylidene)bis[4-chloro-	8080 8270	0.05 10
4,4 1 -DDT	50-29-3	Benzene, 1,1 1 -(2,2,2-trichloroethylidene)bis[4-chloro-	8080 8270	0.1 10
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-,S-(2,3-dichloro-2-propenyl) ester	8270	10
Dibenz[a,h]anthracene	53-70-3	Dibenz[a,h]anthracene	8100 8270	200 10
Dibenzofuran	132-64-9	Dibenzofuran	8270	10
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, dibromochloro-	8010 8021 8260	1 0.3 5
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibrome-3-chloro-	8011 8021 8260	0.1 30 25
1,2-Dibromoethane; Ethylene dribromide; EDB	106-93-4	Ethane, 1,2-dibromo-	8011 8021 8260	0.1 10 5
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	8060 8270	5 10
o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010 8020 8021 8120 8260 8270	2 5 0.5 10 5 10
m-Dichlorobenzene; 1,3-Dichlorobenzene	541-73-1	Benzene, 1,3-Dichloro-	8010 8020 8021 8120 8260 8270	5 5 0.2 10 5 10
p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010 8020 8021 8120 8260 8270	2 5 0.1 15 5 10
3,3 1 -Dichlorobenzidine	91-94-1	[1,1 1 -Biphenyl]-4,4 1 -diamine, 3,3 1 -dichloro-	8270	20
trans-1,4-Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-	8260	100
Dichlorodifluoromethane; CFC 12;	75-71-8	Methane, dichlorodifluoro-	8021 8260	0.5 5
1,1-Dichloroethane; Ethyldidene chloride	75-34-3	Ethane, 1,1-dichloro-	8010 8021 8260	1 0.5 5
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,1-dichloro-	8010 8021 8260	0.5 0.3 5
1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro-	8010 8021 8260	1 0.5 5
cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene	156-59-2	Ethene, 1,2-dichloro-, (Z)-	8021 8260	0.2 5

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
trans-1,2-Dichloroethylene trans-1,2-Dichloroethene	156-60-5	Ethene, 1,2-dichloro-, (E)-	8010 8021 8260	1 0.5 5
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040 8270	5 10
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	10
1,2-Dichloropropane; Propylene dichloride	78-87-5	Propane, 1,2-dichloro-	8010 8021 8260	0.5 0.05 5
1,3-Dichloropropane; Trimethylene dichloride	142-28-9	Propane, 1,3-dichloro-	8021 8260	0.3 5
2,2-Dichloropropane; Isopropylidene chloride	594-20-7	Propane, 2,2-dichloro-	8021 8260	0.5 15
1,1-Dichloropropene	563-58-6	1-Propene, 1,1-dichloro-	8021 8260	0.2 5
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-	8010 8260	20 10
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-, (E)-	8010 8260	5 10
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexa, chloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β, 6aα,7β,7aα)-	8080 8270	0.05 10
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	8060 8270	5 10
0,0-Diethyl 0-2-pyrazinyl phosphorothioate; Thionazin	297-97-2	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester	8141 8270	5 20
Dimethoate	60-51-5	Phosphorodithioic acid, 0,0-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	8141 8270	3 20
p-(Dimethylamino)azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	8270	10
7,12-Dimethylbenz[a]anthracene	57-97-6	Benz[a]anthracene, 7,12-dimethyl-	8270	10
3,3 1 -Dimethylbenzidine	119-93-7	[1,1 1 -Biphenyl]-4,4 1 -diamine, 3,3 1 -dimethyl-	8270	10
2,4-Dimethylphenol; m-Xylenol	105-67-9	Phenol, 2,4-dimethyl-	8040 8270	5 10
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	8060 8270	5 10
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-	8270	20
4,6-Dinitro-o-cresol 4,6-Dinitro-2-methylphenol	534-52-1	Phenol, 2-methyl-4,6-dinitro	8040 8270	150 50
2,4-Dinitrophenol;	51-28-5	Phenol, 2,4-dinitro-	8040 8270	150 50
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4-dinitro-	8090 8270	0.2 10
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3-dinitro-	8090 8270	0.1 10
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	8150 8270	1 20
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	8060 8270	30 10
Diphenylamine	122-39-4	Benzenamine, N-phenyl-	8270	10
Disulfoton	298-04-4	Phosphorodithioic acid, 0,0-diethyl S-[2-(ethylthio)ethyl] ester	8140 8141 8270	2 0.5 10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Endosulfan I	959-98-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide,	8080 8270	0.1 20
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10, 10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα, 6β,9β,9aα)-	8080 8270	0.05 20
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10, 10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-,3-3-dioxide	8080 8270	0.5 10
Endrin	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα, 2β,2aβ,3α,6α, 6aβ,7β,7aα)-	8080 8270	0.1 20
Endrin aldehyde	7421-93-4	1,2,4-Methenocyclopenta[cd]pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro-, (1α,2β, 2aβ,4β,4aβ,5β,6aβ,6bβ,7R*)-	8080 8270	0.2 10
Ethylbenzene	100-41-4	Benzene, ethyl-	8020 8221 8260	2 0.05 5
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	8015 8260 8270	5 10 10
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester	8270	20
Famphur	52-85-7	Phosphorothioic acid, 0-[4-[(dimethylamino)sulfonyl]phenyl] 0,0-dimethyl ester	8270	20
Fluoranthene	206-44-0	Fluoranthene	8100 8270	200 10
Fluorene	86-73-7	9H-Fluorene	8100 8270	200 10
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	8080 8270	0.05 10
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα, 1bβ, 2α, 5α, 5aβ, 6β, 6aα)	8080 8270	1 10
Hexachlorobenzene	118-74-1	Benzene, hexachloro-	8120 8270	0.5 10
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8021 8120 8260 8270	0.5 5 10 10
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	8120 8270	5 10
Hexachloroethane	67-72-1	Ethane, hexachloro-	8120 8260 8270	0.5 10 10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	8270	10
2-Hexanone; Methyl butyl ketone	591-78-6	2-Hexanone	8260	50
Indeno(1,2,3-cd)pyrene	193-39-5	Indeno(1,2,3-cd)pyrene	8100	200
			8270	10
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-	8015	50
			8240	100
Isodrin	465-73-6	1,4,5,8-Dimethanonaphthalene,1, 2,3,4,10,10- hexachloro-1,4,4a, 5,8,8a hexahydro- (1α,4α,4aβ, 5β,8β,8aβ)-	8270	20
			8260	10
Isophorone	78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-	8090	60
			8270	10
Isosafrole	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	8270	10
Kepone	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1, 1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	8270	20
Lead	(Dissolved)	Lead	6010	400
			7420	1000
			7421	10
Mercury	(Total)	Mercury	7470	2
Methacrylonitrile	126-98-7	2-Propenenitrile, 2-methyl-	8015	5
			8260	100
Methapyrilene	91-80-5	1,2-Ethanediamine, N.N-dimethyl-N 1 -2-pyridinyl-N1/2-thienylmethyl)-	8270	100
Methoxychlor	72-43-5	Benzene,1,1 1 -(2,2,2, trichloroethylidene)bis[4-methoxy-	8080	2
			8270	10
Methyl bromide; Bromomethane	74-83-9	Methane, bromo-	8010	20
			8021	10
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010	1
			8021	0.3
3-Methylcholanthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	8270	10
Methyl ethyl ketone; MEK; 2-Butanone	78-93-3	2-Butanone	8015	10
			8260	100
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010	40
			8260	10
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	8015	2
			8260	30
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester	8270	10
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-	8270	10
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, 0,0-dimethyl	8140	0.5
			8141	1
			8270	10
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl-	8015	5
			8260	100
Methylene bromide; Dibromomethane	74-95-3	Methane, dibromo-	8010	15
			8021	20
			8260	10
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-	8010	5
			8021	0.2
			8260	10
Naphthalene	91-20-3	Naphthalene	8021	0.5
			8100	200
			8260	5
			8270	10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione	8270	10
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	10
2-Naphthylamine	91-59-8	2-Naphthalenamine	8270	10
Nickel	(Total)	Nickel	6010	150
			7520	400
o-Nitroaniline; 2-Nitroaniline	88-74-4	Benzenamine, 2-nitro-	8270	50
m-Nitroaniline; 3-Nitroanile	99-09-2	Benzenamine, 3-nitro-	8270	50
p-Nitroaniline; 4-Nitroaniline	100-01-6	Benzenamine, 4-nitro	8270	20
Nitrobenzene	98-95-3	Benzene, nitro-	8090	40
			8270	10
o-Nitrophenol; 2-Nitrophenol	88-75-5	Phenol, 2-nitro-	8040	5
			8270	10
p-Nitrophenol; 4-Nitrophenol	100-02-7	Phenol, 4-nitro-	8040	10
			8270	50
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso-	8270	10
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso-	8270	20
N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-	8070	2
N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8070	5
N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8070	10
N-Nitrosomethylethalamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosopiperidine	100-75-4	Piperidine, 1-nitroso-	8270	20
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-	8270	40
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2-methyl-5-nitro-	8270	10
Parathion	56-38-2	Phosphorothioic acid, 0,0-diethyl 0-(4-nitrophenyl) ester	8141	0.5
			8270	10
Pentachlorobenzene	608-93-5	Benzene, pentachloro-	8270	10
Pentachloronitrobenzene	82-68-8	Benzene, pentachloronitro-	8270	20
Pentachlorophenol	87-86-5	Phenol, pentachloro-	8040	5
			8270	50
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenl)	8270	20
Phenanthrene	85-01-8	Phenanthrene	8100	200
			8270	10
Phenol	108-95-2	Phenol	8040	1
p-Phenylenediamine	106-50-3	1,4-Benzenediamine	8270	10
Phorate	298-02-2	Phosphorodithioic acid, 0,0-diethyl S-[(ethylthio)methyl] ester	8140	2
			8141	0.5
			8270	10
Polychlorinated biphenyls; PCBs; Aroclors	See Note 9	1,1'-Biphenyl, chloro derivatives	8080	50
			8270	200
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	8270	10
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015	60
			8260	150
Pyrene	129-00-0	Pyrene	8100	200
			8270	10
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	10
Selenium	(Dissolved)	Selenium	6010	750
			7740	20
			7741	20
Silver	(Dissolved)	Silver	6010	70
			7760	100
			7761	10
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	8150	2

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Styrene	100-42-5	Benzene, ethenyl-	8020	1
			8021	0.1
			8260	10
Sulfide	18496-25-8	Sulfide	9030	4000
2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	2
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	10
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-	8010	5
			8021	0.05
			8260	5
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-	8010	0.5
			8021	0.1
			8260	5
Tetrachloroethylene; Tetrachloroethene; Perchloroethylene	127-18-4	Ethene, tetrachloro-	8010	0.5
			8021	0.5
			8260	5
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-	8270	10
Thallium	(Dissolved)	Thallium	6010	400
			7840	1000
			7841	10
Tin	(Dissolved)	Tin	6010	40
Toluene	108-88-3	Benzene, methyl-	8020	2
			8021	0.1
			8260	5
o-Toluidine	95-53-4	Benzenamine, 2-methyl-	8270	10
Toxaphene	See Note 10	Toxaphene	8080	2
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-	8021	0.3
			8120	0.5
			8260	10
			8270	10
1,1,1-Trichloroethane; Methylchloroform	71-55-6	Ethane, 1,1,1-trichloro-	8010	0.3
			8021	0.3
			8260	5
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-	8010	0.2
			8260	5
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010	1
			8021	0.2
			8260	5
Trichlorofluoromethane; CFC-11	75-69-4	Methane, trichlorofluoro-	8010	10
			8021	0.3
			8260	5
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5-trichloro-	8270	10
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040	5
			8270	10
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-	8010	10
			8021	5
			8260	15
0,0,0-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, 0,0,0-triethyl-ester	8270	10
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro-	8270	10
Vanadium	(Dissolved)	Vanadium	6010	80
			7910	2000
			7911	40
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8260	50

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Vinyl chloride; Chloroethene	75-01-4	Ethene, chloro-	8010	2
			8021	0.4
			8260	10
Xylene (total)	See Note 11	Benzene, dimethyl-	8020	5
			8021	0.2
			8260	5
Zinc	(Dissolved)	Zinc	6010	20
			7950	50
			7951	0.5

Notes:

1 The regulatory requirements pertain only to the list of substances; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnotes 5 and 6. Also, note that the state ground water quality criteria, chapter 173-200 WAC, takes precedence over these recommended PQL's.

2 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

3 Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

4 CAS index are those used in the 9th Collective Index.

5 Suggested Methods refer to analytical procedure numbers used in EPA Report SW-846 "Test Methods for Evaluating Solid Waste", third edition, November 1986, as revised, December 1987. Analytical details can be found in SW-846 and in documentation on file at the agency. CAUTION: The methods listed are representative SW-846 procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

6 Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in ground waters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 mL samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

7 This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2"-oxybis[2-chloro- (CAS RN 39638-32-9).

8 Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6). PQL shown is for technical chlordane. PQLs of specific isomers are about 20 µg/L by method 8270.

9 Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor 1016 (CAS RN 12674-11-2), Aroclor 1221 (CAS RN 11104-28-2), Aroclor 1232 (CAS RN 11141-16-5), Aroclor 1242 (CAS RN 53469-21-9), Aroclor 1248 (CAS RN 12672-29-6), Aroclor 1254 (CAS RN 11097-69-1), and Aroclor 1260 (CAS RN 11096-82-5). The PQL shown is an average value for PCB congeners.

10 Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

11 Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7). PQLs for method 8021 are 0.2 for o-xylene and 0.1 for m-or p-xylene. The PQL for m-xylene is 2.0 µg/L by method 8020 or 8260.

APPENDIX IV
PARAMETERS FOR LEACHATE ANALYSIS

Appendix I[1] Parameters
Appendix II Parameters
Nitrite
Total Colliform
COD
BOD
Cyanide

1_ All metals analysis should be for total recoverable metals, for the leachate analysis only.

Important Note: All other appendices require dissolved metals (field-filtration for metals).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-990, filed 10/26/93, effective 11/26/93.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

Chapter 173-360 WAC
UNDERGROUND STORAGE TANK REGULATIONS

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-360-640 Types of licenses. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-640, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-650 Examination and licensing of tank services supervisors. [Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-650, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-650, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-655 Examination and licensing of persons who perform inspections. [Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-655, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-655, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-660 Study guide fees. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-660, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-680 Reciprocity with other states. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-680, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-690 Appeals. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-690, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-695 Inactive license. [Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-695, filed 10/29/91, effective 11/29/91.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

PART I
PROGRAM SCOPE, ADMINISTRATION, AND ENFORCEMENT

WAC 173-360-100 Purpose and authority. (1) The purpose of this chapter is to address the serious threat posed to human health and the environment by leaking underground storage systems containing petroleum and other regulated substances.

(2) The department of ecology is directed by chapter 90.76 RCW to establish an underground storage tank program designed, operated and enforced in a manner that, at a minimum, meets the requirements for delegation of the Federal Underground Storage Tank Program of the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. Section 6901, et seq.). The legislative intent is that statewide requirements for underground storage tanks adopted by the department be consistent with and no less stringent than the objectives outlined in the federal regulations. Because certain areas of the state possess physical characteristics that make them especially vulnerable to threats from leaking underground storage tanks, local requirements more stringent than the statewide requirements may apply in these environmentally sensitive areas.

(Note: All codes, standards, rules, or regulations cited in this chapter are available for inspection at the Department of Ecology, P.O. Box 47655, Olympia, WA 98504-7655.)

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-100, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-100, filed 11/28/90, effective 12/29/90.]

WAC 173-360-105 Intergovernmental agreements. In order to fully implement this chapter, and to protect surface and ground water resources that may cross jurisdictional boundaries, the department and delegated agencies may negotiate and enter into cooperative agreements with Indian tribal governments, adjacent states, and Canadian governmental agencies when agencies are delegated responsibility for carrying out all or a portion of the underground storage

tank program contiguous with or affecting lands under tribal, state, or Canadian government jurisdiction. Such cooperative agreements shall not affect the regulatory jurisdiction of any party thereto with regard to any civil or criminal matters otherwise exercised by any party. Intergovernmental agreements shall further the purpose of this chapter, and shall serve to establish a framework for intergovernmental coordination and cooperation, and shall serve to minimize duplication and efficiently utilize program resources to manage underground storage tanks and protect surface and ground water resources.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-105, filed 11/28/90, effective 12/29/90.]

WAC 173-360-110 Applicability, exemptions, and deferrals. (1) The requirements of this chapter apply to all owners and operators of an underground storage tank (UST) system as defined in WAC 173-360-120 except as otherwise provided in subsections (2) and (3) of this section. It is the responsibility of owners and operators to ensure that any UST supervisors they employ are properly certified in accordance with WAC 173-360-600 through 173-360-630.

(2) Exemptions. The following UST systems, including any piping connected thereto, are exempt from the requirements of this chapter:

(a) Any UST system holding hazardous wastes subject to Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances.

(b) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act.

(c) Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks.

(d) Any UST system whose capacity is one hundred ten gallons or less.

(e) Any UST system that has never contained more than a de minimis concentration of regulated substances as defined in WAC 173-360-120.

(f) Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

(g) Farm or residential UST systems of one thousand one hundred gallons or less capacity used for storing motor fuel for noncommercial purposes (see definition of "farm" and "residential");

(h) UST systems used for storing heating oil for consumptive use on the premises where stored; except that such systems which store in excess of one thousand one hundred gallons are subject to the release reporting requirements of WAC 173-360-372;

(i) Septic tanks;

(j) Any pipeline facility (including gathering lines) regulated under:

(i) The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.); or

(ii) The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.); or

(iii) Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of the law referred to in (j) (i) or (ii) of this subsection;

(k) Surface impoundments, pits, ponds, or lagoons;

(l) Storm water or wastewater collection systems;

(m) Flow-through process tanks;

(n) Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; or

(o) Storage tanks situated in an underground area (such as a basement, cellar, vault, mineworking drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

(3) Deferrals. The following UST systems are subject only to the requirements of WAC 173-360-130, 173-360-140, 173-360-160, 173-360-170, 173-360-190, 173-360-200, 173-360-372, 173-360-385 and 173-360-390. Any new deferred UST systems shall also be subject to the performance standards of WAC 173-360-300:

(a) Wastewater treatment tank systems not regulated under section 307(b) or 402 of the Clean Water Act;

(b) Any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.);

(c) Any UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR Part 50 Appendix A;

(d) Airport hydrant fuel distribution systems;

(e) UST systems with field-constructed tanks.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-110, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-110, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-110, filed 11/28/90, effective 12/29/90.]

WAC 173-360-120 Definitions. For the purposes of this chapter, the following definitions shall apply:

"Abandoned" means left unused indefinitely, without being substantially emptied or permanently altered structurally to prevent reuse.

"Aboveground release" means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the above-ground portion of an UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system.

"Accidental release" means any sudden or nonsudden release of petroleum from an underground storage tank that results in a need for corrective action and/or compensation for bodily injury or property damage neither expected nor intended by the tank owner or operator.

"Ancillary equipment" means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of regulated substances to and from an UST.

"Belowground release" means any release to the subsurface of the land and/or to ground water. This includes, but is not limited to, releases from the belowground portions of an underground storage tank system and belowground releases associated with overfills and transfer operations as the regulated substance moves to or from an underground storage tank.

"Beneath the surface of the ground" means beneath the ground surface or otherwise covered with earthen materials.

"Bodily injury" shall have the meaning given to this term by applicable state law; however, this term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for bodily injury.

"Cathodic protection" means a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

"Certified UST supervisor" means a person certified by the International Fire Code Institute or another nationally recognized organization, as approved by the department. Washington registered professional engineers who are competent, by means of examination, experience, or education, to perform site assessments, are not required to be certified for site assessment work.

"Closure" means to take an underground storage tank out of operation, either temporarily or permanently, in accordance with WAC 173-360-380 or 173-360-385. The term is synonymous with "decommissioning."

"Compatible" means the ability of two or more substances or materials to maintain their respective physical and chemical properties upon contact with one another such that the stored substance will not pass through the wall or lining of the tank and connected piping for the design life of the tank system under conditions likely to be encountered in the UST.

"Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.

"Consumptive use" with respect to heating oil means consumed on the premises.

"Controlling interest" means direct ownership of at least fifty percent of the voting stock of another entity.

"Corrosion expert" means a person who possesses a thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, and is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

"Decommissioning" means to take an underground storage tank out of operation, either temporarily or permanently, in accordance with WAC 173-360-380 or 173-360-385. The term is synonymous with "closure."

"Deferral" means a category of UST systems which are subject to certain, but not all, of the requirements of this chapter as specified in WAC 173-360-110(3).

"Delegated agency" means a state or local government agency which has been delegated responsibility by the department for administering any portion of an UST program.

"De minimis concentration" means either less than one inch of regulated substance, or less than a reportable quantity, as defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

"Department" means the department of ecology.

"Dielectric material" means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate UST systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the UST system (e.g., tank from piping).

"Director" means the director of the department of ecology.

"Electrical equipment" means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

"Emergency power generator" means an engine that uses fuel to produce auxiliary electrical or mechanical energy for use in emergencies.

"Emergency power generator tank" means a tank that stores fuel solely for use by an emergency power generator.

"Excavation zone" means the volume containing the UST system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

"Existing UST system" means an UST system used to contain an accumulation of regulated substances or for which installation had commenced on or before December 22, 1988. Installation is considered to have commenced if: The owner or operator had obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system; and if

Either a continuous on-site physical construction or installation program had begun; or

The owner or operator had entered into contractual obligations—which cannot be cancelled or modified without substantial loss—for physical construction at the site or installation of the tank system to be completed within a reasonable time.

"False alarm" means indicating that an UST system is leaking when in fact it is tight.

"Farm tank" is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank must be located on the farm property and used for farm purposes. "Farm" includes fish hatcheries, rangeland, and nurseries with growing operations. It does not include laboratories where animals are raised, land used to grow timber, pesticide aviation operations, retail stores or garden centers where nursery products are marketed but not grown, cemeteries, golf courses, or other facilities dedicated primarily to recreation or aesthetics, or other non-agricultural activities.

"Field-constructed tank" means an underground storage tank that is constructed in the field rather than factory built because of its large size.

"Financial reporting year" means the latest consecutive twelve-month period for which any of the following reports used to support a financial test is prepared: A 10-K report submitted to the SEC; an annual report of tangible net worth submitted to Dun and Bradstreet; or annual reports submitted to the Energy Information Administration or the Rural Electrification Administration. "Financial reporting year" may thus comprise a fiscal or a calendar year period.

"Firm" means any business, including but not limited to corporations, limited partnerships, and sole proprietorships, engaged in performing tank services.

"Flow-through process tank" is a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

"Free product" refers to a regulated substance that is present as a nonaqueous phase liquid (e.g., liquid not dissolved in water).

"Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"Hazardous substance UST system" means an underground storage tank system that contains a hazardous substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C) or any mixture of such substances and petroleum, and which is not a petroleum UST system.

"Heating oil" means petroleum that is No. 1, No. 2, No. 4—light, No. 4—heavy, No. 5—light, No. 5—heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.

"Hydraulic lift tank" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

"Immiscible" means largely incapable of blending or mixing.

"Installation" means the activity of placing an underground storage tank system or any part thereof in the ground and preparing it to be placed in service.

"Legal defense cost" is any expense that an owner or operator or provider of financial assurance incurs in defending against claims or actions brought: By the United States Environmental Protection Agency (EPA) or a state to require corrective action or to recover the costs of corrective action; by or on behalf of a third party for bodily injury or property damage caused by an accidental release; or by any person to enforce the terms of a financial assurance mechanism.

"Liquid trap" means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

"Maintenance" means the normal operational upkeep to prevent an underground storage tank system from releasing a regulated substance.

"Motor fuel" means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any grade of gasohol, and is typically used in the operation of a motor engine.

"New UST system" means a tank system that will be used to contain an accumulation of regulated substances and for which installation commenced after December 22, 1988. (See also "existing tank system.")

"Noncommercial purposes" with respect to motor fuel means not for resale.

"Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in a release from an underground storage tank.

Note: This definition is intended to assist in the understanding of WAC 173-360-400 through 173-360-499 and is not intended either to limit the meaning of "occurrence" in a way that conflicts with standard insurance usage or to prevent the use of other standard insurance terms in place of "occurrence."

"On the premises where stored" with respect to heating oil means UST systems located on the same property where the stored heating oil is used.

"Operational life" refers to the period beginning when installation of the tank system has commenced until the time the tank system is properly closed under WAC 173-360-380 through 173- 360-398.

"Operator" means any person in control of, or having responsibility for, the daily operation of the UST system.

"Overfill release" is a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment.

"Owner" means: In the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who owns an UST system used for storage, use, or dispensing of regulated substances; and in the case of any UST system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use. In the event that the owner of an UST system cannot be physically located, the owner shall be the person who owns the property where the UST system is located, except any lien holder and any agency of the state or unit of local government which acquired ownership or control involuntarily through bankruptcy, tax delinquency, abandonment, or circumstances in which the government involuntarily acquires title. This exclusion does not apply to an agency of the state or unit of local government which has caused or contributed to a release or threatened release of a regulated substance from the UST system.

"Owner or operator," means, for the purposes of WAC 173-360-400 through 173-360-499, when the owner or oper-

ator are separate parties, the party that is responsible for obtaining or has obtained financial assurances.

"Party" means a person or group concerned or having or taking part in any affair, matter, transaction, or proceeding.

"Permanently closed" means: (1) In the case of an UST system taken out of operation before December 22, 1988, the UST system was substantially emptied of regulated substances or permanently altered structurally to prevent reuse; (2) in the case of an UST system taken out of operation after December 21, 1988, and before the effective date of this chapter, the UST system was closed in accordance with 40 CFR 280; and (3) in the case of an UST system taken out of operation on or after the effective date of this chapter, the UST system was closed in accordance with WAC 173-360-385.

"Person" means an individual, trust, firm, joint stock company, federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body. "Person" also includes a consortium, a joint venture, a commercial entity, and the United States government.

"Petroleum marketing facilities" include all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public.

"Petroleum marketing firms" are all firms owning petroleum marketing facilities. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms.

"Petroleum UST system" means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

"Pipe" or "piping" means a hollow cylinder or tubular conduit that is constructed of nonearthen materials.

"Pipeline facilities (including gathering lines)" are new and existing pipe rights-of-way and any associated equipment, facilities, or buildings.

"Property damage" shall have the meaning given this term by applicable state law. This term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for property damage. However, such exclusions for property damage shall not include corrective action associated with releases from tanks which are covered by the policy.

"Provider of financial assurance" means an entity that provides financial assurance to an owner or operator of an underground storage tank through one of the mechanisms listed in WAC 173-360-413 through 173-360-436, including a guarantor, insurer, risk retention group, surety, issuer of a letter of credit, issuer of a state-required mechanism, or a state.

"Regulated substance" means:

Any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and any other regulated substances); and

Petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (sixty degrees Fahrenheit and 14.7 pounds per square inch absolute). The term "regulated substance" includes but is not limited to petroleum and petroleum-based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils. The term "regulated substance" does not include propane or asphalt or any other petroleum product which is not liquid at standard conditions of temperature and pressure.

"Release" means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an UST system to ground water, surface water or soils.

"Release detection" means determining whether a release of a regulated substance has occurred from the UST system into the environment or into the interstitial space between the UST system and its secondary barrier or secondary containment around it.

"Repair" means to restore a tank or UST system component that has caused a release of a regulated substance from the UST system.

"Residential tank" is a tank located on property used primarily for dwelling purposes; such properties do not include dormitories, convents, mobile parks, apartments, hotels and similar facilities, unless the tank is used by the owner solely for his or her own personal use, rather than to maintain the overall facility.

"Retrofitting" means the repair or upgrading of an existing underground storage tank system including, but not limited to, installation of splash, spill and overfill protection, installing or replacing monitoring systems, adding cathodic protective systems, tank repair, replacement of piping, valves, fill pipes or vents and installing tank liners.

"Septic tank" is a water-tight covered receptacle designed and used to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

"Site assessment" means investigating an UST site for the presence of a release at the time of closure or change-in-service.

"Site check" means investigating an UST site for the presence of a release when evidence indicates that a release may have occurred.

"Stormwater or wastewater collection system" means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

"Structural defect" means a hole or crack in the tank portion of the UST system, which has either caused a release from the system or is being repaired to prevent a release from the system.

"Substantial business relationship" means the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued "incident to that relationship" if it arises from and depends on existing economic transactions between the guarantor and the owner or operator.

"Supervisor" means a person certified by the International Fire Code Institute, or other nationally recognized organization, operating independently or employed by a contractor, who is responsible for directing and overseeing the performance of tank services at a facility.

"Surface impoundment" is a natural topographic depression, excavation, or diked area formed primarily of earthen materials (although it may be lined with synthetic materials) that is not an injection well.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition, "assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.

"Tank" is a stationary device designed to contain an accumulation of regulated substances and constructed of nonearthen materials (e.g., concrete, steel, plastic) that provide structural support.

"Tank permit" means a tank tag, as required by RCW 90.76.020(4).

"Tank services" include underground storage tank installation, decommissioning, retrofitting, and testing.

"Termination" under WAC 173-360-476 and 173-360-480 means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.

"Testing" means applying a method to determine the integrity of an underground storage tank.

"Tightness testing" means a procedure for testing the ability of a tank system to prevent an inadvertent release of any stored substance into the environment or, intrusion of ground water into a tank system.

"Underground area" means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

"Underground release" means any below ground release.

"Underground storage tank" or "UST" means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is ten percent or more beneath the surface of the ground. This term does not include any of the exempt UST systems specified in WAC 173-360-110(2), or any piping connected thereto.

"Upgrade" means the addition or retrofit of some systems such as cathodic protection, lining, or spill and overfill controls to improve the ability of an underground storage tank system to prevent the release of regulated substances.

"UST site" or "site" means the location at which underground storage tanks are in place or will be placed. An UST site encompasses all of the property within a contiguous ownership that is associated with the use of the tanks.

"UST system" or "tank system" means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any.

"Wastewater treatment tank" means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-120, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-120, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-120, filed 11/28/90, effective 12/29/90.]

WAC 173-360-130 Tank permits and delivery of regulated substances. (1) Requirement for a permit. After July 1, 1991, no underground storage tank system, as defined in this chapter, shall be operated without a valid permit from the department or its delegated agency. However, possession of a valid permit does not preclude enforcement against the owner or operator of the underground storage tank under this or other laws.

(2) Application for a permit. Permits for UST systems shall be obtained as follows:

(a) To apply for a permit for a new UST system the owner or operator shall complete an UST notification form, as specified in WAC 173-360-200(2) and submit it with payment of the applicable annual fee, as specified in WAC 173-360-190, to the delegated agency. If no delegated agency exists, the application shall be submitted to the department.

(b) To apply for a permit for an existing UST system not previously reported to the department, the owner or operator shall complete a Washington state underground storage tank notification form, as specified in WAC 173-360-200(2), and submit it to the delegated agency with a payment of the applicable annual fee, as specified in WAC 173-360-190, including any fees which should have been paid for earlier fiscal years if the UST system had been properly registered, but which were not paid. If no delegated agency exists, the application shall be made to the department.

(c) To apply for a permit for a tank which has been temporarily out of service, the owner or operator shall notify the department of the change in status and follow the provisions of WAC 173-360-380.

(d) Each year the department will request owners and operators of reported UST systems to certify compliance with the requirements of this chapter. UST systems which are in the department's notification data base when the department requests this certification will receive permits by July 1 of each year if:

(i) Adequate documentation of compliance, as specified by the department, is submitted to the delegated agency, or, if no delegated agency exists, to the department; and

(ii) Applicable fees have been paid.

(3) Eligibility for a permit. Tanks which are temporarily closed under WAC 173-360-380 are not eligible to receive permits. Underground storage tank systems are eligible for a permit if the following conditions are met:

(a) The owner or operator is in compliance with all requirements of this chapter, including the financial responsibility requirements, and chapter 173-340 WAC, if applicable, or the owner or operator is in conformance with a compliance schedule negotiated with and agreed to by the department;

(b) The storage tank system is not known by the owner or operator to be leaking; and

(c) All annual state tank fees and local environmentally sensitive area tank fees have been remitted.

(4) Delivery of regulated substances. Regulated substances shall not be delivered to any underground storage tank requiring a permit under this section unless a valid permit is displayed on such tank itself or the dispensing or measuring device connected thereto or, where appropriate, in the office or kiosk of the facility where the tank is located or unless otherwise authorized in writing by the department. This subsection applies only to suppliers who directly transfer regulated substances into underground storage tank systems.

(5) Waste oil tanks. Tanks used to collect and store used or waste oil regulated under this chapter shall not be pumped by a used or waste oil collector unless a valid permit is displayed on such tank itself or a device connected thereto or, where appropriate, in the office or kiosk of the facility where the tank is located. This prohibition does not apply to a one-time removal of substances from tanks which will not be used again for the storage of used or waste oil once the substances are removed; such tanks must be properly closed or undergo the procedures for a change-in-service in accordance with WAC 173-360-385. This subsection applies only to used or waste oil collectors who directly transfer regulated substances from underground storage tanks.

(6) Delivery prohibited to leaking tanks. Suppliers shall not deliver regulated substances to any underground storage tank which is known by the supplier to be leaking, or to have leaked and not been properly repaired, regardless of the permit status of the tank.

(7) Delivery of regulated substances. If a confirmed release occurs from a permitted tank, in addition to meeting the reporting requirements of WAC 173-360-372, within twenty-four hours of having knowledge of the release the owner or operator shall lock the fill pipe and remove from display the permit for the tank from which the release has occurred. At no time can the owner or operator receive regulated substances, until all the applicable requirements of this chapter and chapter 173-340 WAC have been met. If the department determines that reasonable progress is not being made in meeting these requirements it may request that the owner or operator surrender the permit, as specified in subsection (8) of this section, for the tank from which the release occurred.

(8) Permit revocation. The department may request the surrender of a permit for any tank which does not remain in compliance with the requirements of this chapter, including financial responsibility requirements and payment of fees, or for any violation of the chapter by an underground storage tank owner or operator, including refusal of access to property under WAC 173-360-140. Upon request of a representative of the department or delegated agency or upon receipt of a letter from the department or delegated agency requesting surrender of the permit, the owner or operator must return the permit to the department or delegated agency within seven days.

(9) When a tank is closed, any active permit must be returned to ecology within thirty days of the completion of the closure procedures.

(10) Appeals. The revocation of a permit may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-130, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-130, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-130, filed 11/28/90, effective 12/29/90.]

WAC 173-360-140 Investigation and access. (1) If necessary to determine compliance with the requirements of this chapter, an authorized representative of the state engaged in compliance inspections, monitoring and testing may, by request, require an owner or operator to submit relevant information or documents. The department may subpoena witnesses, documents, and other relevant information that the department deems necessary. In the case of any refusal to obey the subpoena, the superior court for any county in which the person is found, resides, or transacts business has jurisdiction to issue an order requiring the person to appear before the department and give testimony or produce documents. Any failure to obey the order of the court may be punished by the court as contempt.

(2) Any authorized representative of the state may require an owner or operator to conduct monitoring or testing.

(3) Upon reasonable notice, an authorized representative of the state may enter a premises or site subject to regulation under this chapter or in which records relevant to the operation of an underground storage tank system are kept. In the event of an emergency or in circumstances where notice would undermine the effectiveness of an inspection, notice is not required. The authorized representative may copy records, obtain samples of regulated substances, and inspect or conduct monitoring or testing of an underground storage tank system.

(4) For purposes of this section, the term "authorized representative" or "authorized representative of the state" means an enforcement officer, employee, or representative of the department or a local government that has obtained authority under RCW 90.76.030.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-140, filed 11/28/90, effective 12/29/90.]

WAC 173-360-150 Compliance monitoring. The department's compliance monitoring procedures, including procedures for recordkeeping and a program for systematic inspections, shall be consistent with and no less stringent than those required by 40 CFR 281.40 and amendments thereto.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-150, filed 11/28/90, effective 12/29/90.]

WAC 173-360-160 Enforcement. (1) The director may seek appropriate injunctive or other judicial relief by filing an action in Thurston County Superior Court or issuing such order as the director deems appropriate to:

(a) Enjoin any threatened or continuing violation of this chapter;

(b) Restrain immediately and effectively a person from engaging in unauthorized activity that results in a violation of any requirement of this chapter and is endangering or causing damage to public health or the environment;

(c) Require compliance with requests for information, access, testing, or monitoring under WAC 173-360-140; or

(d) Assess and recover civil penalties authorized under RCW 90.76.080.

(2) The department's enforcement procedures shall be consistent with and no less stringent than those required by 40 CFR 281.41 and amendments thereto.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-160, filed 11/28/90, effective 12/29/90.]

WAC 173-360-170 Penalties. (1) Any person who fails to notify the department pursuant to the notification requirements of this chapter, or who submits false information, is subject to a civil penalty not to exceed five thousand dollars per violation.

(2) Any person who violates this chapter is subject to a civil penalty not to exceed five thousand dollars for each tank per day of violation.

(3) Penalties may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-170, filed 11/28/90, effective 12/29/90.]

WAC 173-360-180 Public participation and information sharing. The department's procedures for public participation and information sharing shall be consistent with and no less stringent than those required by 40 CFR 281.42 and 281.43 and amendments thereto.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-180, filed 11/28/90, effective 12/29/90.]

WAC 173-360-190 Annual tank fees. (1) An annual tank fee of one hundred dollars per tank is effective from July 1, 1998, to June 30, 1999. Annually, beginning on July 1, 1999, and upon a finding by the department that a fee increase is necessary, the previous tank fee amount may be increased up to the fiscal growth factor for the next year. The fiscal growth factor is calculated by the office of financial management under RCW 43.135.025 for the upcoming biennium. The department shall use the fiscal growth factor to calculate the fee for the next year and shall publish the new fee by March 1st before the year for which the new fee is effective. The new tank fee is effective from July 1st to June 30th of every year. The tank fee shall be paid by every person who:

(a) Owns an underground storage tank located in this state; and

(b) Was required to provide notification to the department under the federal act.

This fee is not required of persons who have

(i) Permanently closed their tanks; and

(ii) If required, have completed corrective action in accordance with the rules adopted under this chapter.

(2) The department may authorize the imposition of additional annual local tank fees in environmentally sensitive areas designated under RCW 90.76.040. Annual local tank fees may not exceed fifty percent of the annual state tank fee.

(3) State and local tank fees collected under this section shall be deposited in the account established under RCW 90.76.100.

(4) Other than the annual local tank fee authorized for environmentally sensitive areas, no local government may levy an annual tank fee on the ownership or operation of an underground storage tank.

[Statutory Authority: Chapter 90.76 RCW. 98-15-069 (Order 98-08), § 173-360-190, filed 7/14/98, effective 7/14/98; 95-04-102, § 173-360-190, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-190, filed 11/28/90, effective 12/29/90.]

PART II
NOTIFICATION, REPORTING, AND RECORDKEEPING REQUIREMENTS

Note: Tank owners and operators may be subject to certain local requirements in addition to the state UST regulations. Permits or approval for construction activities may be required by local jurisdictions. These may include, but are not limited to, requirements to obtain grading, building or demolition permits, and requirements for compliance with local ordinances pertaining to environmental review under the state Environmental Policy Act (chapter 43.21C RCW).

WAC 173-360-200 Notification requirements. (1) Notice of intent to install a new UST system. Except in the circumstances defined in subsection (5) of this section, any owner who intends to install a new UST system shall submit a notice of such intent to the department or delegated agency at least thirty days and not more than ninety days prior to installing the UST system. Such notice shall meet the following requirements:

(a) The notice of intent shall be provided on the appropriate Washington state form, which is available from the department;

(b) Each UST system to be installed which is regulated under this chapter shall be reported;

(c) Owners may provide notice for more than one UST system using a single form, but UST systems to be installed at separate sites shall be reported on separate forms; and

(d) The completed form shall include all of the information required on the form.

(2) Notification of new UST systems in use. Within thirty days of bringing any newly installed UST system regulated under this chapter into use, the owner shall submit notice of such UST system to the department. This notice shall meet the following requirements:

(a) The notice shall be provided on the appropriate Washington state underground storage tank notification form, which is available from the department;

(b) Each tank regulated under this chapter shall be reported;

(c) Owners may provide notice for more than one tank using a single notification form, but owners who own tanks

located at more than one site shall file a separate notification form for each site;

(d) Notification required under this section shall include all of the information required on the form for each tank for which notice must be given; and

(e) Notification for tanks installed after December 22, 1988, shall also certify compliance with the following requirements:

(i) Corrosion protection of steel tanks and piping under WAC 173-360-305 (1) and (2);

(ii) Financial responsibility under WAC 173-360-400 through 173-360-499; and

(iii) Release detection under WAC 173-360-335 and 173-360-340.

(3) Certification of installation. All owners and operators of new UST systems shall ensure that the methods used to install the tanks and piping comply with the requirements in WAC 173-360-305(4). Such certification shall be accomplished by completing a notification form, which is available from the department, as specified in WAC 173-360-305(5). The form must be signed by the certified UST supervisor.

(4) Notification of existing UST systems. Owners of any existing UST system regulated under this chapter which has not previously been reported to the department shall provide notification regarding such UST system immediately, following the requirements of subsection (2) (a) through (e) of this section.

Note: Owners and operators of UST systems that were in the ground on or after May 8, 1986, unless taken out of operation on or before January 1, 1974, were required to notify the department in accordance with the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, on a form published by Washington state unless notice was given pursuant to section 103(c) of CERCLA.

(5) Emergency replacement of UST systems.

(a) An exception to the thirty-day notice requirement for new installations in subsection (1) of this section is allowed when an UST system is being replaced on an emergency basis due to a release from the system being replaced. An emergency shall be regarded as a newly discovered release from an UST system which is:

(i) In operation at the time of the release;

(ii) Located at an operating facility; and

(iii) Necessary for the normal operation of the facility.

(b) Under the circumstances described in (a) of this subsection, the notice of intent to install an UST system may be provided after the installation of the new system but no more than seven days after the installation is completed. The information which must be included in the notice of intent form is the same as in subsection (1) of this section. A site assessment meeting the requirements of WAC 173-360-390 shall be completed prior to installing a tank in the excavation pit of a tank being replaced and prior to installing new piping in the piping trench of piping being replaced.

(6) Changes to UST systems. Any changes in the information initially reported in the notification form submitted under subsection (2), (4) or (5) of this section, including temporary closure of an UST system that was initially reported as being in use, shall be reported to the department or delegated agency by submitting a new notification form within thirty days after such changes occur.

(7) Beginning October 24, 1988, any person who sells a new tank which is intended to be used as an underground storage tank, or an existing UST system or property including an existing UST system which is intended to be used as an UST system, shall notify the purchaser of such tank or UST system of the owner's notification obligations under this section.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-200, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-200, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-200, filed 11/28/90, effective 12/29/90.]

WAC 173-360-210 Reporting and recordkeeping requirements. Owners and operators of UST systems shall cooperate fully with inspections, monitoring, and testing conducted by the department or delegated agency, as well as requests for document submission, testing, and monitoring by the owner or operator pursuant to RCW 90.76.060.

(1) Reporting. Owners and operators shall submit the information specified in (a) through (e) of this subsection to the department or delegated agency:

(a) Notification for all UST systems (WAC 173-360-200), which includes certification of installation for new UST systems (WAC 173-360-305(5));

(b) Reports of all suspected releases (WAC 173-360-360), confirmed releases (WAC 173-360-372), and spills and overfills (WAC 173-360-375);

(c) Reports required for corrective actions under chapter 173-340 WAC;

(d) A notification before permanent closure or change-in-service (WAC 173-360-385); and

(e) The appropriate forms, certificates of compliance, and evidence of financial responsibility (WAC 173-360-446).

(f) Checklists required for tank service activities, site checks, and site assessments shall be signed by certified UST supervisors and submitted to the department by the owner or operator.

(2) Recordkeeping. Owners and operators shall maintain the following information:

(a) Documentation of operation of corrosion protection equipment (WAC 173-360-320);

(b) Documentation of UST system repairs (WAC 173-360-325(7));

(c) Recent compliance with release detection requirements (WAC 173-360-355);

(d) Results of the site assessment conducted at permanent closure (WAC 173-360-398);

(e) Corrective action records in accordance with chapter 173-340 WAC; and

(f) Evidence of financial assurance mechanisms used to demonstrate financial responsibility (WAC 173-360-450).

(3) Availability and maintenance of records. Owners and operators shall keep the records required either:

(a) At the UST site and immediately available for inspection by the department or delegated agency; or

(b) At a readily available alternative site and be provided for inspection to the department or delegated agency upon request.

(c) In the case of permanent closure records required under WAC 173-360-398, owners and operators are also provided with the additional alternative of mailing closure records to the department or delegated agency if they cannot be kept at the site or an alternative site as indicated above.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-210, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-210, filed 11/28/90, effective 12/29/90.]

PART III
PERFORMANCE STANDARDS AND OPERATING AND CLOSURE REQUIREMENTS

WAC 173-360-300 Performance standards for deferred UST systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, no person may install a deferred UST system listed in WAC 173-360-110(3) for the purpose of storing regulated substances unless the UST system (whether of single-wall or double-wall construction):

(1) Will prevent releases due to corrosion or structural failure for the operational life of the UST system;

(2) Is cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a noncorrodible material, or designed in a manner to prevent the release or threatened release of any stored substance; and

(3) Is constructed or lined with material that is compatible with the stored substance.

Note: The provisions of WAC 173-360-305 and EPA's publication *The Interim Prohibition: Guidance for Design and Installation of Underground Storage Tanks* may be used to satisfy the requirements of this section.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-300, filed 11/28/90, effective 12/29/90.]

WAC 173-360-305 Performance standards for new UST systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, all owners and operators of new UST systems shall meet the following requirements:

(1) Tanks. Each tank shall be properly designed and constructed with material that is compatible with and impermeable to the stored substance, and any portion underground that routinely contains regulated substances shall be protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified under (a) through (d) below:

(a) The tank is constructed of fiberglass-reinforced plastic; or

Note: The following industry codes may be used to comply with subsection (1)(a) of this section: Underwriters Laboratories Standard 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products"; Underwriter's Laboratories of Canada CAN4-S615-M83, "Standard for Reinforced Plastic Underground Tanks for Petroleum Products"; or American Society of Testing and Materials Standard D4021-86, "Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks."

(b) The tank is constructed of steel and cathodically protected in the following manner:

(i) The tank is coated with a suitable dielectric material;

(ii) The tank is equipped with a factory-installed or field-installed cathodic protection system designed by a corrosion expert;

(iii) Cathodic protection systems are designed and installed to include provisions for testing to allow a determination of current operating status as required in WAC 173-360-320(2) and to facilitate testing by the department or delegated agency in accordance with WAC 173-360-325 (5) and (6); and

(iv) Cathodic protection systems are operated and maintained in accordance with WAC 173-360-320 or according to guidelines established by the department or delegated agency; or

Note: The following codes and standards may be used to comply with subsection (1)(b) of this section:

(A) Steel Tank Institute "Specification for STI-P3 System of External Corrosion Protection of Underground Steel Storage Tanks";

(B) Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks";

(C) Underwriters Laboratories of Canada CAN4-S603-M85, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," and CAN4-G03.1-M85, "Standard for Galvanic Corrosion Protection Systems for Underground Tanks for Flammable and Combustible Liquids," and CAN4-S631-M84, "Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems"; or

(D) National Association of Corrosion Engineers Standard RP- 02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and Underwriters Laboratories Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids."

(c) The tank is constructed of a steel-fiberglass-reinforced- plastic composite; or

Note: The following industry codes may be used to comply with subsection (1)(c) of this section: Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks," or the Association for Composite Tanks ACT-100, "Specification for the Fabrication of FRP Clad Underground Storage Tanks."

(d) The tank construction and corrosion protection are determined by the department or delegated agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than subsection (1)(a) through (c) of this section.

(2) Piping. The piping that routinely contains regulated substances and is in contact with the ground shall be properly designed and constructed with material that is compatible with and impermeable to the stored substance, and protected from corrosion in accordance with a code of practice devel-

oped by a nationally recognized association or independent testing laboratory as specified below:

(a) The piping is constructed of fiberglass-reinforced plastic; or

Note: The following codes and standards may be used to comply with subsection (2)(a) of this section:

(i) Underwriters Laboratories Subject 971, "UL Listed Non- Metal Pipe";

(ii) Underwriters Laboratories Standard 567, "Pipe Connectors for Flammable and Combustible and LP Gas";

(iii) Underwriters Laboratories of Canada Guide ULC-107, "Glass Fiber Reinforced Plastic Pipe and Fittings for Flammable Liquids"; and

(iv) Underwriters Laboratories of Canada Standard CAN 4-S633- M81, "Flexible Underground Hose Connectors."

(b) The piping is constructed of steel and cathodically protected in the following manner:

(i) The piping is coated with a suitable dielectric material;

(ii) Field-installed cathodic protection systems are designed by a corrosion expert;

(iii) Cathodic protection systems are designed and installed to include provisions for testing to allow a determination of current operating status as required in WAC 173-360-320(2) and to facilitate testing by the department or delegated agency in accordance with WAC 173-360-325 (5) and (6); and

(iv) Cathodic protection systems are operated and maintained in accordance with WAC 173-360-320 or guidelines established by the department or delegated agency; or

Note: The following codes and standards may be used to comply with subsection (2)(b) of this section:

(A) National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code";

(B) American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems";

(C) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"; and

(D) National Association of Corrosion Engineers Standard RP- 01-69, "Control of External Corrosion on Submerged Metallic Piping Systems."

(c) The piping construction and corrosion protection are determined by the department or delegated agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in subsection (2)(a) and (b) of this section.

(d) Metal flexible underground hose connectors shall be cathodically protected or covered with sleeves or jackets that will provide corrosion protection over the operating life of the UST system.

(3) Spill and overfill prevention equipment.

(a) Except as provided in subsection (3)(b) of this section, to prevent spilling and overfilling associated with transfer of regulated substances to the UST system, owners and operators shall use the following spill and overfill prevention equipment:

(i) Spill prevention equipment that will prevent release of regulated substances to the environment when the transfer hose is detached from the fill pipe (for example, a spill catchment basin); and

(ii) Overfill prevention equipment that will:

(A) Automatically shut off flow into the tank when the tank is no more than ninety-five percent full;

(B) Alert the transfer operator when the tank is no more than ninety percent full by restricting the flow into the tank or triggering a high-level alarm; or

(C) Restrict flow thirty minutes prior to overfilling, alert the operator with a high level alarm one minute before overfilling, or automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to regulated substances due to overfilling.

Note: Overflow prevention equipment that will automatically shut off or restrict flow into the tank should not be used where a pressurized fuel transfer system may be employed since an overflow may occur when the flow is suddenly shut off or restricted.

(b) Owners and operators are not required to use the spill and overfill prevention equipment specified in subsection (3)(a) of this section if:

(i) Alternative equipment is used that is determined by the department or delegated agency to be no less protective of human health and the environment than the equipment specified in subsection (3)(a)(i) or (ii) of this section; or

(ii) The UST system is filled by transfers of no more than twenty-five gallons at one time.

(4) Installation. All tanks and piping shall be properly installed by an UST supervisor who is certified in tank system installation in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions.

Note: Tank and piping system installation practices and procedures described in the following codes may be used to comply with the requirements of subsection (4) of this section:

(a) American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage System"; or

(b) Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems"; or

(c) American National Standards Institute Standard B31.3, "Petroleum Refinery Piping," and American National Standards Institute Standard B31.4 "Liquid Petroleum Transportation Piping System."

(5) Certification of installation. All owners and operators shall ensure compliance with subsection (4) of this section by submitting a properly completed notification form to the delegated agency, or, if no delegated agency exists, to the department. The form must be signed by a certified UST supervisor.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-305, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-305, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-305, filed 11/28/90, effective 12/29/90.]

WAC 173-360-310 Upgrading requirements for existing UST systems. (1) Alternatives allowed. Not later

than December 22, 1998, all existing UST systems shall comply with one of the following requirements:

(a) New UST system performance standards under WAC 173-360-305;

(b) The upgrading requirements in subsections (2) through (4) of this section; or

(c) Closure requirements under WAC 173-360-380 through 173- 360-398, including applicable requirements for corrective action under WAC 173-360-399.

(2) Tank upgrading requirements. Steel tanks shall be upgraded by a certified UST supervisor to meet one of the following requirements in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory:

(a) Interior lining. A tank may be upgraded by internal lining if:

(i) The lining is installed in accordance with the requirements of WAC 173-360-325; and

(ii) Within ten years after lining, and every five years thereafter, the lined tank is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications, unless cathodic protection is also installed within ten years of lining the tank, as specified in WAC 173-360-310 (2)(c).

(b) Cathodic protection. A tank may be upgraded by cathodic protection if the cathodic protection system meets the requirements of WAC 173-360-305 (1)(b)(ii), (iii), and (iv) and the integrity of the tank is ensured using one of the following methods:

(i) The tank is internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes prior to installing the cathodic protection system; or

(ii) The tank has been installed or internally lined for less than ten years and is monitored monthly for releases in accordance with WAC 173-360-345 (6)(e) through (j); or

(iii) The tank has been installed or internally lined for less than ten years and is assessed for corrosion holes by conducting two tightness tests that meet the requirements of WAC 173-360-345 (6)(d). The first tightness test shall be conducted prior to installing the cathodic protection system. The second tightness test shall be conducted between three and six months following the first operation of the cathodic protection system; or

(iv) The tank is assessed for corrosion holes by a method that is determined by the department or delegated agency to prevent releases in a manner that is no less protective of human health and the environment than subsection (2)(b)(i) through (iii) of this section.

(c) Internal lining combined with cathodic protection. A tank may be upgraded by both internal lining and cathodic protection if:

(i) The lining is installed in accordance with the requirements of WAC 173-360-325; and

(ii) The cathodic protection system is installed within ten years of the tank being lined and meets the requirements of WAC 173-360-305 (1)(b)(ii), (iii), and (iv).

Note: The following codes and standards may be used to comply with this section:

(A) American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks";

(B) National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection";

(C) National Association of Corrosion Engineers Standard RP- 02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems";

(D) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"; and

(E) Steel Tank Institute Publication STI F894-91 "Specifications for External Corrosion Protection FRP Composite Underground Steel Storage Tanks."

(3) Piping upgrading requirements. Metal piping that routinely contains regulated substances and is in contact with the ground shall be cathodically protected in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and shall meet the requirements of WAC 173-360-305 (2)(b)(ii), (iii), and (iv).

Note: The codes and standards listed in the note following WAC 173-360-305 (2)(b) may be used to comply with this requirement.

(4) Spill and overfill prevention equipment. To prevent spilling and overfilling associated with transfer of regulated substances to the UST system, all existing UST systems shall comply with new UST system spill and overfill prevention equipment requirements specified in WAC 173-360-305(3), except that an UST system that is filled by transfers of no more than twenty-five gallons at a time is not required to use spill and overfill prevention equipment.

(5) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-310, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-310, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-310, filed 11/28/90, effective 12/29/90.]

WAC 173-360-315 Spill and overfill control requirements. (1) Owners and operators shall ensure that releases due to spilling or overfilling do not occur. The owner and operator shall ensure that the volume available in the tank is greater than the volume of regulated substances to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.

Note: The transfer procedures described in National Fire Protection Association Publication 385 may be used to comply with paragraph (a) of this section. Further guidance on spill and overfill prevention appears in American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," and National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code."

(2) The owner and operator shall report, investigate, and clean up any spills and overfills in accordance with WAC 173-360-375.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-315, filed 11/28/90, effective 12/29/90.]

WAC 173-360-320 Operation and maintenance of corrosion protection. All owners and operators of steel UST systems with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented for as long as the UST system is used to store regulated substances:

(1) All corrosion protection systems shall be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are in contact with the ground.

(2) All UST systems equipped with cathodic protection systems shall be inspected for proper operation by an UST supervisor who is certified in cathodic protection in accordance with the following requirements:

(a) Frequency. All cathodic protection systems shall be tested when they are installed, and again between one and six months after installation, and at least every three years thereafter or according to another reasonable time frame established by the department or delegated agency; and

(b) Inspection criteria. The criteria that are used to determine that cathodic protection is adequate as required by this section shall be in accordance with a code of practice developed by a nationally recognized association.

Note: National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," may be used to comply with subsection (2)(b) of this section.

(3) UST systems with impressed current cathodic protection systems shall also be inspected every 60 days to ensure the equipment is running properly.

(4) For UST systems using cathodic protection, records of the operation of the cathodic protection shall be maintained to demonstrate compliance with the performance standards in this section. These records shall provide the following:

(a) The results of the last three inspections required in subsection (3) of this section; and

(b) The results of testing from the last two inspections required in subsection (2) of this section.

(5) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-320, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-320, filed 11/28/90, effective 12/29/90.]

WAC 173-360-323 Compatibility. Owners and operators shall use an UST system made of or lined with materials that are compatible with and impermeable to the substance stored in the UST system.

Note: Owners and operators storing alcohol blends may use the following codes to comply with the requirements of this section:

(1) American Petroleum Institute Publication 1626, "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations"; and

(2) American Petroleum Institute Publication 1627, "Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations."

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-323, filed 11/28/90, effective 12/29/90.]

WAC 173-360-325 Repairs of UST systems. Repairs to UST systems shall be performed by a certified UST supervisor. Owners and operators of UST systems shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. Any UST system which is repaired to correct a structural defect must also be upgraded at the time of the repair to meet the requirements specified in WAC 173-360-310 (1)(a) or (b), and must employ a method of release detection for the tank as specified in WAC 183-360-335, 173-360-340 or 173-360-345, as applicable, and a method of release detection for the piping as specified in WAC 173-360-350. The repairs shall meet the following requirements:

(1) Repairs to UST systems shall be properly conducted by an UST supervisor certified in tank installation and retrofitting in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

Note: The following codes and standards may be used to comply with subsection (1) of this section: National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"; American Petroleum Institute Publication 2200, "Repairing Crude Oil, Liquified Petroleum Gas, and Product Pipelines"; American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks"; and National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection."

(2) Repairs to fiberglass-reinforced plastic tanks shall be made in accordance with the manufacturer's specifications or a code of practice developed by a nationally recognized association or an independent testing laboratory.

(3) Metal pipe sections and fittings that have released regulated substances as a result of corrosion or other damage shall be replaced. Fiberglass pipes and fittings may be repaired in accordance with the manufacturer's specifications.

(4) Repaired tanks and piping shall be tightness tested in accordance with WAC 173-360-345 (6)(d) and 173-360-350 (3)(b) within thirty days following the date of the completion of the repair except as provided in subsection (4) (a) through (c), of this section:

(a) The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory; or

(b) The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in WAC 173-360-345 (6)(e) through (j); or

(c) Another test method is used that is determined by the department or delegated agency to be no less protective of human health and the environment than those listed above.

(5) Except as specified in subsection (6) of this section, within six months following the repair of any cathodically protected UST system, the cathodic protection system shall be tested in accordance with WAC 173-360-320 (2) and (3) to ensure that it is operating properly.

(6) Any repair to a cathodic protection system shall be tested in accordance with WAC 173-360-320 (2) and (3), at the time of the repair and again between one and six months following the repair.

(7) UST system owners and operators shall maintain records of each repair for the remaining operating life of the UST site that demonstrate compliance with the requirements of this section.

(8) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-325, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-325, filed 11/28/90, effective 12/29/90.]

WAC 173-360-330 Release detection compliance schedule. Owners and operators of all UST systems shall comply with the release detection requirements of WAC 173-360-330 through 173-360-355 by December 22 of the year listed in the following table:

TABLE: SCHEDULE FOR PHASE-IN OF RELEASE DETECTION

Year System was installed	Year when release detection is required (by December 22 of the year indicated)						
	1989	1990	1991	1992	1993	1994	1995
Before 1965 or date unknown.	RD	P	E				
1965-69..		P/RD		E			
1970-74..		P	RD		E		
1975-79..		P		RD		E	
1980-88..		P			RD		E

New tanks (after December 22, 1988,) immediately upon installation, except that emergency generator tanks installed between 1989 and 1990 must have release detection by 1996 and emergency generator tanks installed after December 29, 1990, must have release detection immediately upon installation.

P- Except for pressurized piping associated with emergency power generator tanks, release detection required by December 22, 1990.

RD- Except for emergency power generator tanks, must begin release detection for tanks and suction piping in accordance with WAC 173-360-335 (2)(a), 173-360-350 (2)(b), and 173-360-340.

E- Must begin release detection for emergency power generator tanks and piping in accordance with WAC 173-360-335 (2)(a) and 173-360-350 (2)(a) or (b).

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-330, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-330, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-330, filed 11/28/90, effective 12/29/90.]

WAC 173-360-335 Release detection for petroleum UST systems. (1) Owners and operators of new and existing petroleum UST systems shall provide a method, or combination of methods, of release detection that:

(a) Can detect a release from any portion of the tank and the connected underground piping that routinely contains a regulated substance;

(b) Is installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition; and

(c) Meets the performance requirements in WAC 173-360-345 or 173-360-350.

(2) Owners and operators of petroleum UST systems shall monitor tanks and piping for releases as follows:

(a) Tanks. Tanks shall be monitored at least every thirty days for releases using one of the methods listed in WAC 173-360-345 (6)(e) through (j) except as provided in WAC 173-360-345 (2) through (5).

(b) Piping. Underground piping that routinely contains regulated substances shall be monitored for releases as required under WAC 173-360-350.

(3) Owners and operators of any existing UST system that cannot apply a method of release detection that complies with the applicable requirements of WAC 173-360-330 through 173-360-355 shall complete the closure procedures in WAC 173-360-380 through 173-360-398 by the date on which release detection is required for that UST system under WAC 173-360-330.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-335, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-335, filed 11/28/90, effective 12/29/90.]

WAC 173-360-340 Release detection for hazardous substance UST systems. Owners and operators of hazardous substance UST systems shall provide release detection that meets the following requirements:

(1) Release detection at existing hazardous substance UST systems shall meet the requirements for petroleum UST systems in WAC 173-360-335. By December 22, 1998, all existing hazardous substance UST systems shall meet the release detection requirements for new systems in subsection (2) of this section.

(2) Release detection at new hazardous substance UST systems shall employ some method of release containment such as secondary containment systems, double-walled tanks, or external liners (e.g., in a pit or excavation). Such methods shall meet the following requirements:

(a) Secondary containment systems shall be designed, constructed and installed to:

(i) Contain regulated substances released from the tank system until they are detected and removed;

(ii) Prevent precipitation and ground water from entering the external liner and prevent the release of regulated substances to the environment at any time during the operational life of the UST system; and

(iii) Be checked for evidence of a release at least every thirty days.

Note: The provisions of 40 CFR 265.193, Containment and Detection of Releases, may be used to comply with these requirements.

(b) Double-walled tanks shall be designed, constructed, and installed to:

(i) Contain a release from any portion of the inner tank within the outer wall; and

(ii) Detect the failure of the inner wall.

(c) External liners (including vaults) shall be designed, constructed, and installed to:

(i) Contain one hundred ten percent of the capacity of the largest tank within its boundary;

(ii) Prevent the interference of precipitation or groundwater intrusion with the ability to contain or detect a release of regulated substances; and

(iii) Surround the tank completely (i.e., it is capable of preventing lateral as well as vertical migration of regulated substances).

(d) Underground piping shall be equipped with secondary containment that satisfies the requirements of subsection (2)(a) of this section (e.g., trench liners, jacketing double-walled pipe). In addition, underground piping that conveys regulated substances under pressure shall be equipped with an automatic line leak detector in accordance with WAC 173-360-350 (3)(a).

(e) Other methods of release detection may be used if owners and operators:

(i) Demonstrate to the department or delegated agency that an alternate method can detect a release of the stored substance as effectively as any of the methods allowed in WAC 173-360-345 (6)(b) through (j) can detect a release of petroleum;

(ii) Provide information to the department or delegated agency on effective corrective action technologies, health risks, and chemical and physical properties of the stored substance, and the characteristics of the UST site; and

(iii) Obtain approval from the department or delegated agency to use the alternate release detection method before the installation and operation of the new UST system.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-340, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-340, filed 11/28/90, effective 12/29/90.]

WAC 173-360-345 Methods of release detection for tanks. (1) Any method of release detection for tanks shall meet the performance requirements of this section. In addition, methods used after December 22, 1990, except for methods permanently installed prior to that date, shall be capable of detecting the leak rate or quantity specified for that method in subsection (6)(b), (c), (d), and (e) of this section with a probability of detection of 0.95 and a probability of false alarm of 0.05. (That is, under test conditions, a method will correctly detect at least ninety-five of one hundred actual releases, and will falsely indicate a release no more than five times in one hundred tests of nonleaking systems.)

Note: The establishment of leak indication thresholds is a means of setting a standard for the equipment or method used. It is not in any way meant to imply that actual leak rates less than these limits are allowable. No release is acceptable, and any indication that a release may have occurred should be investigated in accordance with WAC 173-360-360. Manufacturers and certified UST supervisors installing or utilizing leak detection equipment and/or methods must follow EPA's standard test procedures for evaluating leak detection methods to demonstrate compliance with the requirements of subsection (1) of this section.

(2) UST systems that meet the new tank or upgraded tank performance standards in WAC 173-360-305 or 173-360-310, and the inventory control requirements in subsection (6)(a) or (b) of this section, may use tank tightness testing (conducted in accordance with subsection (6)(d) of this section) at least every five years until December 22, 1998, or until ten years after the tank is installed or upgraded under WAC 173-360-310(2), whichever is later.

(3) UST systems that do not meet the new tank or upgraded tank performance standards in WAC 173-360-305 or 173-360-310 may use inventory controls (conducted in accordance with subsection (6)(a) or (b) of this section) and annual tank tightness testing (conducted in accordance with subsection (6)(d) of this section) until December 22, 1998, when the tank shall be upgraded under WAC 173-360-310 or permanently closed under WAC 173-360-385.

(4) Tanks with capacity of one thousand gallons or less may use weekly tank gauging conducted in accordance with subsection (6)(b) of this section.

(5) Tanks that store fuel solely for use by emergency power generators may use the following methods of release detection:

(a) Emergency power generator tanks with nominal capacity of one thousand gallons or less may use monthly tank gauging conducted in accordance with subsection (6)(c) of this section.

(b) Emergency power generator tanks with nominal capacity of one thousand one to two thousand gallons may use monthly tank gauging conducted in accordance with subsection (6)(c) of this section, in conjunction with annual tank tightness testing conducted in accordance with subsection (6)(d) of this section.

(c) Except as provided in subsection (2) of this section, emergency power generator tanks with nominal capacity greater than two thousand gallons may use weekly tank gauging conducted in accordance with subsection (6)(b) of this section, in conjunction with annual tank tightness testing conducted in accordance with subsection (6)(d) of this section.

(6) Each method of release detection for tanks used to meet the requirements of WAC 173-360-335 shall be conducted in accordance with the following:

(a) Daily inventory control. Daily inventory control (or another test of equivalent performance) shall be conducted in a manner capable of detecting a release of at least 1.0 percent of flow-through plus 130 gallons on a monthly basis in the following manner:

(i) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day;

(ii) The equipment used is capable of measuring the level of regulated substance in the tank over the full range of the tank's height to the nearest one-eighth of an inch;

(iii) The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery;

(iv) Deliveries are made through a drop tube that extends to within one foot of the tank bottom;

(v) Dispensing of regulated substances is metered and recorded within the local standards for meter calibration or an accuracy of at least six cubic inches for every five gallons of regulated substances which is withdrawn; and

(vi) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch at least once a month.

Note: Practices described in the American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," may be used, where applicable, as guidance in meeting the requirements of this paragraph.

(b) Weekly tank gauging. Only tanks of one thousand gallons or less nominal capacity may use weekly tank gauging as the sole method of release detection. Tanks of one thousand one to two thousand gallons may use the method in place of daily inventory control in (a) of this subsection, in conjunction with tank tightness testing, as specified in (d) of this subsection. Tanks of greater than two thousand gallons nominal capacity may use this method to meet the requirements of WAC 173-360-330 through 173-360-355 only if such tanks store fuel solely for use by emergency power generators. Weekly tank gauging shall meet the following requirements:

(i) Tank liquid level measurements are taken weekly at the beginning and ending of a period of at least thirty-six hours during which no liquid is added to or removed from the tank;

(ii) Level measurements are based on an average of two consecutive stick readings at both the beginning and ending of the period (that is, four measurements shall be taken, two consecutive measurements at the beginning and two consecutive measurements at the end of the period during which no liquid has been added or removed from the tank);

(iii) The equipment used is capable of measuring the level of regulated substance in the tank over the full range of the tank's height to the nearest one-eighth of an inch;

(iv) If the variation between beginning and ending measurements exceeds the weekly or monthly standards in the following table, a leak may be occurring and the requirements of WAC 173-360-360 through 173-360-375 shall be followed:

Nominal Tank Capacity	Weekly Standard (one test)	Monthly Standard
550 gallons or less	10 gallons	5 gallons
551-1,000 gallons	13 gallons	7 gallons
1,001-2,000 gallons	26 gallons	13 gallons
2,001 gallons or more*	.75% of capacity	.5% of capacity

(*Emergency Power Generator Tanks only.)

(c) Monthly tank gauging. Only tanks that store fuel solely for use by emergency power generators with a nominal capacity of two thousand gallons or less may use monthly tank gauging as a method of release detection. Such tanks with nominal capacity of one thousand one to two thousand gallons may use manual tank gauging in conjunction with tank tightness testing conducted in accordance with this section. Monthly tank gauging shall meet the following requirements:

(i) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded whenever inputs or withdrawals occur;

(ii) Tank liquid level measurements reconciled with inventory volume measurements are taken monthly at the beginning and ending of a period of at least twenty-one days, except when extreme snowfall or other travel obstructions occurring in remote locations and preventing access are specifically documented by the owner and operator;

(iii) Level measurements are based on an average of two consecutive readings at both the beginning and ending of the period (that is, four measurements shall be taken, two consecutive measurements at the beginning and two consecutive measurements at the end of the period);

(iv) The equipment used is capable of measuring the level of regulated substance in the tank over the full range of the tank's height to the nearest one-eighth of an inch or a corresponding amount of gallons;

(v) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch at least once a month;

(vi) If the variation between beginning and ending measurements exceeds the monthly standards in the following table, a leak may be occurring and the requirements of WAC 173-360-360 through 173-360-375 shall be followed:

Nominal Tank Capacity	Monthly Standard
550 gallons or less	5 gallons
551-1,000 gallons	7 gallons
1,001-2000 gallons	13 gallons

(d) Tank tightness testing. Tank tightness testing (or another test of equivalent performance) shall be capable of detecting at least a 0.1 gallon per hour leak rate from any portion of the tank up to the ninety-five percent full level or up to the product level limited by an overfill prevention device while accounting for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table. Tank tightness testing shall be conducted and the results reported in accordance with the instructions for that method.

(e) Automatic tank gauging. Equipment for automatic tank gauging that tests for the loss of regulated substance and conducts inventory control shall meet the following requirements:

(i) The automatic product level monitor test can detect at least a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance;

(ii) Daily inventory control (or another test of equivalent performance) is conducted in accordance with the requirements of (a) of this subsection; and

(iii) Automatic tank gauging equipment must be operated in the test mode at least once per year, and the results kept on file.

(f) Vapor monitoring. Testing or monitoring for vapors within the soil gas of the excavation zone shall meet the following requirements:

(i) The materials used as backfill are sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation zone;

(ii) The stored regulated substance, or a tracer compound placed in the tank system, is sufficiently volatile (e.g., gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank;

(iii) The measurement of vapors by the monitoring device is not rendered inoperative by the ground water, rainfall, or soil moisture or other known interferences so that a release could go undetected for more than thirty days;

(iv) The level of background contamination in the excavation zone will not interfere with the method used to detect releases from the tank;

(v) The vapor monitors are designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the tank system, a component or components of that substance, or a tracer compound placed in the tank system;

(vi) In the UST excavation zone, the site is evaluated for its appropriateness for installation of vapor monitors to ensure compliance with the requirements of this subsection and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the tank that routinely contains a regulated substance; and

(vii) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

Note: Monitoring wells must also comply with the minimum standards for construction, maintenance, and abandonment of resource protection wells specified in chapter 173-160 WAC. UST system owners and operators are encouraged to retain the services of a qualified professional who is experienced in determining the design and placement of vapor monitoring wells surrounding an UST system.

(g) Ground water monitoring. Testing or monitoring for liquids on or in the ground water shall meet the following requirements:

(i) The regulated substance stored is immiscible in water and has a specific gravity of less than one;

(ii) Ground water is never more than twenty feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec (e.g., the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials);

(iii) The slotted portion of the monitoring well casing shall be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low ground-water conditions;

(iv) Monitoring wells shall be sealed from the ground surface to the top of the filter pack;

(v) Monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible;

(vi) The continuous monitoring devices or manual methods used can detect the presence of at least one-eighth of an inch of free product on top of the ground water in the monitoring wells;

(vii) Within and immediately below the UST system excavation zone, the site is evaluated for its appropriateness for installation of ground water monitors to ensure compliance with the requirements in (g)(i) through (v) of this subsection and to establish the number and positioning of monitoring wells or devices that will detect releases from any portion of the tank that routinely contains a regulated substance; and

(viii) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

Note: Monitoring wells must also comply with the minimum standards for construction, maintenance, and abandonment of wells specified in chapter 173-160 WAC. UST system owners and operators are encouraged to retain the services of a qualified professional who is experienced in determining the design and placement of ground water monitoring wells surrounding an UST system.

(h) Interstitial monitoring. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the tank that routinely contains a regulated substance and also meets one of the following requirements:

(i) For double-walled UST systems, the sampling or testing method can detect a release through the inner wall in any portion of the tank that routinely contains a regulated substance;

Note: The provisions outlined in the Steel Tank Institute's "Standard for Dual Wall Underground Storage Tanks" may be used as guidance for aspects of the design and construction of underground steel double-walled tanks.

(ii) For UST systems with a secondary barrier within the excavation zone, the sampling or testing method used can detect a release between the UST system and the secondary barrier;

(A) The secondary barrier around or beneath the UST system consists of artificially constructed material that is sufficiently thick and impermeable (at least 10^{-6} cm/sec for the regulated substance stored) to direct a release to the monitoring point and permit its detection;

(B) The barrier is compatible with the regulated substance stored so that a release from the UST system will not cause a deterioration of the barrier allowing a release to pass through undetected;

(C) For cathodically protected tanks, the secondary barrier shall be installed so that it does not interfere with the proper operation of the cathodic protection system;

(D) The ground water, soil moisture, or rainfall will not render the testing or sampling method used inoperative so that a release could go undetected for more than thirty days;

(E) The site is evaluated for its appropriateness for installation of interstitial monitors to ensure that the secondary barrier is always above the ground water and not in a twenty-five-year flood plain, unless the barrier and monitoring designs are for use under such conditions; and

(F) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(iii) For tanks with an internally fitted liner, an automated device can detect a release between the inner wall of the tank and the liner, and the liner is compatible with the substance stored.

(i) Statistical inventory reconciliation. Statistical inventory reconciliation (SIR) shall meet the following requirements:

(i) Statistical inventory reconciliation must detect at least a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05; and

(ii) Daily inventory control must be performed in accordance with the requirements of (a) of this subsection; and

(iii) Owners and operators must submit daily inventory records from at least the previous thirty days on a monthly basis to a SIR vendor whose statistical analysis method has been demonstrated to meet the performance standard of (i) of this subsection; and

(iv) The SIR vendor must perform an independent SIR analysis on the daily inventory records submitted and report the results to the owner or operator within fifteen days of receiving them; and

(v) If the results of a SIR analysis show a 0.2 gallon per hour or greater leak rate in any single month, from any portion of the tank that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05, it shall be determined to be a "fail." If an owner or operator receives a "fail" for two consecutive months, the owner or operator shall have a tank tightness test conducted in accordance with (d) of this subsection within fifteen days of receiving the second "fail" from the SIR vendor.

(j) Other methods. Any other type of release detection method, or combination of methods, can be used if:

(i) It can detect a 0.2 gallon per hour leak rate or a release of one hundred fifty gallons within a month with a probability of detection of 0.95 and a probability of false alarm of 0.05; or

(ii) The department or delegated agency may approve another method if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in (d) through (i) of this subsection. In comparing methods, the department or delegated agency shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, the owner and operator shall comply with any conditions imposed by the department or delegated agency on its use to ensure the protection of human health and the environment.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-345, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-345, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-345, filed 11/28/90, effective 12/29/90.]

WAC 173-360-350 Methods of release detection for piping. (1) Any method of release detection for piping shall meet the performance requirements of this section, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer. In addition, release detection methods, except for those methods permanently installed prior to December 22, 1990, shall be capable of detecting the leak rate or quantity specified for that method in subsection (3)(a) and (b) of this section with a probability of detection of 0.95 and a probability of false alarm of 0.05. (That is, under test conditions, a method will correctly detect at least ninety-five of one hundred actual releases, and will falsely indicate a release no more than five times in one hundred tests of nonleaking systems.)

Note: The establishment of leak indication thresholds is a means of setting a standard for the equipment or method used. It is not in any way meant to imply that actual leak rates less than these limits are allowable. No release is acceptable, and any indication that a release may have occurred should be investigated in accordance with WAC 173-360-360.

(2) Underground piping that routinely contains regulated substances shall be monitored for releases in a manner that meets one of the following requirements:

(a) Pressurized piping. Underground piping that conveys regulated substances under pressure shall:

(i) Be equipped with an automatic line leak detector conducted in accordance with subsection (3)(a) of this section; and

(ii) Have an annual line tightness test conducted by a certified UST supervisor in accordance with subsection (3)(b) of this section or have monthly monitoring conducted in accordance with subsection (3)(c) of this section.

(b) Suction piping. Underground piping that conveys regulated substances under suction shall either have a line tightness test conducted at least every three years beginning when release detection is required and in accordance with subsection (3)(b) of this section, or use a monthly monitoring method conducted in accordance with subsection (3)(c) of this section. No release detection is required for suction piping that is designed and constructed to meet the following standards:

(i) The below-grade piping operates at less than atmospheric pressure;

(ii) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;

(iii) Only one check valve is included in each suction line;

(iv) The check valve is located directly below and as close as practical to the suction pump; and

(v) A method is provided that allows compliance with subsection (2)(b)(ii) through (iv) of this section to be readily determined.

(3) Each method of release detection for piping used to meet the requirements of WAC 173-360-335 shall be conducted in accordance with the following:

(a) Automatic line leak detectors. Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of three gallons per hour at ten pounds per square inch line pressure within one hour. An annual test of the operation of the leak detector shall be conducted in accordance with the manufacturer's requirements.

(b) Line tightness testing. A periodic test of piping may be conducted only if it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure, or if it can detect a leak rate equal to multiplying 0.1 gallon per hour

by the square root of the value obtained by dividing the line pressure during testing by 1.5 times the operating pressure. Line tightness testing shall be conducted and results interpreted and reported in accordance with the department's guidance document for tightness testing, or as otherwise directed by the department or delegated agency.

(c) Applicable tank methods. Any of the methods in WAC 173-360-345 (6)(f) through (j) may be used if they are designed to detect a release from any portion of the underground piping that routinely contains regulated substances.

(4) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-350, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-350, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-350, filed 11/28/90, effective 12/29/90.]

WAC 173-360-355 Release detection recordkeeping. All UST system owners and operators shall maintain records demonstrating compliance with all applicable requirements of WAC 173-360-330 through 173-360-355. These records shall include the following:

(1) All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, shall be maintained for five years, or for another reasonable period of time determined by the department or delegated agency, from the date of installation;

(2) The results of any sampling, testing, or monitoring shall be maintained for at least five years, or for another reasonable period of time determined by the department or delegated agency, except that the results of tank tightness testing conducted in accordance with WAC 173-360-345 (6)(d) shall be retained until the next test is conducted; and

(3) Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on-site shall be maintained for at least five years after the servicing work is completed, or for another reasonable time period determined by the department or delegated agency. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer shall be retained for five years from the date of installation.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-355, filed 11/28/90, effective 12/29/90.]

WAC 173-360-360 Reporting of suspected releases. Owners and operators of UST systems shall report to the department or delegated agency within twenty-four hours, or another reasonable time period specified by the department or delegated agency, and follow the procedures in WAC 173-360-370 when any of the following conditions apply:

(1) Owners and operators or others discover released regulated substances at the UST site or in the surrounding area (including but not limited to the presence of free product or its constituents in soils, basements, sewer and utility lines, ground water, and/or surface water).

(2) Unusual operating conditions are observed by owners and operators (such as the erratic behavior of product dispensing equipment, the sudden loss of a regulated substance from the UST system, or an unexplained presence of water in the tank), unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced; or

(3) Monitoring results from a release detection method required under WAC 173-360-335 and 173-360-340 indicate that a release may have occurred unless:

(a) A false alarm is confirmed;

(b) The monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result; or

(c) In the case of inventory control, a second month of data does not confirm the initial result, except that owners and operators shall immediately investigate all larger-than-normal or reoccurring variations in inventory control results, and report such variations if they are unaccounted for, without waiting to obtain a second month of data.

Note: Other federal, state, and local laws also require reporting, and in some cases investigation, of suspected releases.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-360, filed 11/28/90, effective 12/29/90.]

WAC 173-360-365 Investigation due to off-site impacts. When required by the department or delegated agency, owners and operators of UST systems shall follow the procedures in WAC 173-360-370 to determine if the UST system is the source of off-site impacts. These impacts include the discovery of regulated substances (including but not limited to the presence of free product or its constituents in soils, basements, sewer and utility lines, ground water, and/or surface water) that has been observed by the department or delegated agency or brought to their attention by another person.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-365, filed 11/28/90, effective 12/29/90.]

WAC 173-360-370 Release investigation and confirmation steps. Unless corrective action is initiated in accordance with WAC 173-360-399, owners and operators shall immediately investigate and confirm all suspected releases of regulated substances requiring reporting under WAC 173-360-360 within seven days of discovery, or another reasonable time period specified by the department or delegated agency, using either the following steps or another procedure approved by the department or delegated agency:

(1) System test. Owners and operators shall have tests conducted (according to the requirements for tightness testing in WAC 173-360-345 (6)(d) and 173-360-350 (3)(b)) that determine whether a leak exists in any portions of the UST system that routinely contains a regulated substance, including the tank and the attached delivery piping, and in any connected tanks and piping that may or may not be in use. All such portions shall be tested either separately or together or in combinations thereof.

(a) Owners and operators shall have their system repaired, replaced, upgraded or closed by a certified UST supervisor and shall begin corrective action in accordance

with WAC 173-360-399 if the test results for the system, tank, or delivery piping indicate that a leak exists.

(b) Further investigation is not required if the test results for the system, tank, and delivery piping do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a release.

(c) Owners and operators shall conduct a site check in accordance with subsection (2) of this section if the test results for the system, tank, and delivery piping do not indicate that a leak exists but environmental contamination is the basis for suspecting a release.

(2) Site check. Owners and operators shall have a certified UST supervisor, as specified in WAC 173-360-610, sample for the presence of a release. Such samples shall be taken, analyzed, and results reported to the department or delegated agency in accordance with the department's guidance document for site checks and site assessments, or as otherwise directed by the department or delegated agency, where contamination is most likely to be present at the UST site.

(a) If the site check results indicate that a release has occurred, owners and operators shall report to the department or delegated agency in accordance with WAC 173-360-372 and begin corrective action in accordance with WAC 173-360-399.

(b) If the site check results indicate that a release has occurred, further investigation is not required under this chapter, but the release must be characterized and remediated in accordance with chapter 173-340 WAC.

(3) Certified UST supervisors who perform any of the tank services described in this section, shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-370, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-370, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-370, filed 11/28/90, effective 12/29/90.]

WAC 173-360-372 Reporting of confirmed releases. Owners and operators shall report all confirmed releases, including but not limited to those confirmed in accordance with WAC 173-360-370 and 173-360-390, and those required to be reported under WAC 173-360-375, to the department or delegated agency within twenty-four hours.

Note: Other federal, state, and local laws also require reporting, and in some cases cleanup, of confirmed releases.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-372, filed 11/28/90, effective 12/29/90.]

WAC 173-360-375 Cleanup and reporting of spills and overfills. (1) Owners and operators of UST systems shall immediately contain and clean up any spill or overfill of petroleum or hazardous substances in accordance with subsections (2) and (3) of this section. Spills and overfills shall also be reported as follows:

(a) Owners and operators shall immediately report any spill or overfill of petroleum and the results of any related cleanup to the department or delegated agency if the spill or overfill comes in contact with soil, ground water, or surface water. Spills or overfills of petroleum which are above a de minimis amount but do not come in contact with soil, ground water, or surface water shall be reported within twenty-four hours. A de minimis amount of petroleum is any amount that immediately evaporates or that is specified by the department or delegated agency through guidance documents. Spills or overfills of petroleum which do not exceed a de minimis amount and do not come in contact with soil, ground water, or surface water are not required to be reported.

(b) Owners and operators shall immediately report any spill or overfill of a hazardous substance and the results of any related cleanup to the department or delegated agency if the spill or overfill comes in contact with soil, ground water, or surface water. Spills or overfills of hazardous substances which are above a de minimis amount but which do not come in contact with soil, ground water, or surface water shall also be reported immediately. A de minimis amount of a hazardous substance is any amount that is below the specified reportable quantity under CERCLA. Spills or overfills of hazardous substances which do not exceed a de minimis amount and do not come in contact with soil, ground water, or surface water are not required to be reported.

Note: A release of a hazardous substance equal to or in excess of its reportable quantity under CERCLA (40 CFR 302) must also be reported immediately to the National Response Center under sections 102 and 103 of CERCLA (40 CFR 302.6) and to the appropriate state and local authorities under Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR 355.40).

(2) Containment and cleanup shall include the following actions:

(a) Visually inspect and take immediate action to prevent any further release and/or spreading of the regulated substance into the environment, including surrounding soils, ground water, and surface water;

(b) Eliminate or minimize any fire, explosion, and vapor hazards, and absorb or otherwise contain all free product and provide for proper disposal of such product and any used absorbent materials in accordance with all applicable federal, state, and local requirements. Free product shall not be flushed into storm drains, catch basins, dry wells, monitoring wells, or other locations with a possible connection to surrounding soils, ground water, or surface water; and

(c) Provide for proper disposal of, or treat, any contaminated soils in accordance with all applicable federal, state, and local requirements.

(3) Owners and operators shall take appropriate action in accordance with WAC 173-360-399 in the following cases:

(a) A spill or overfill of petroleum that results in a release to the environment of less than twenty-five gallons or another reasonable amount specified by the department or delegated agency, if cleanup is not or cannot be accomplished within twenty-four hours or another reasonable time period established by the department or delegated agency;

(b) A spill or overfill of petroleum that results in a release to the environment that exceeds twenty-five gallons or another reasonable amount specified by the department or delegated agency;

(c) A spill or overfill of petroleum, regardless of amount, that results in ground water contamination or causes a sheen

on ground water or surface water, including such water in dry wells;

(d) A spill or overfill of a hazardous substance that results in a release to the environment that is less than the reportable quantity under CERCLA, if cleanup is not or cannot be accomplished within twenty-four hours or another reasonable time period established by the department or delegated agency; and

(e) A spill or overfill of a hazardous substance that results in a release to the environment that equals or exceeds its reportable quantity under CERCLA (40 CFR 302).

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-375, filed 11/28/90, effective 12/29/90.]

WAC 173-360-380 Temporary closure of UST systems. (1) When an UST system is temporarily closed, owners and operators shall continue operation and maintenance of corrosion protection in accordance with WAC 173-360-320, and any release detection in accordance with WAC 173-360-330 through 173-360-355. WAC 173-360-360 through 173-360-375 and 173-360-399 shall be complied with if a release is suspected or confirmed. However, release detection is not required as long as the UST system is empty. The UST system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the system.

(2) When an UST system is temporarily closed for three months or more, owners and operators shall also comply with the following requirements:

(a) Leave vent lines open and functioning; and

(b) Cap and secure all other lines, pumps, entryways, and ancillary equipment.

(3) Any UST system temporarily closed for three months or more shall be tightness tested by a certified UST supervisor in accordance with WAC 173-360-345 (6)(d) and 173-360-350 (3)(b) prior to being put back into service unless the system is subject to and in compliance with the release detection requirements of WAC 173-360-330.

(4) When an UST system is temporarily closed for more than twelve months, owners and operators shall have a certified UST supervisor permanently close the UST system if it does not either meet the performance standards in WAC 173-360-305 for new UST systems or the upgrading requirements in WAC 173-360-310 (2) and (3). Such UST systems shall be permanently closed in accordance with WAC 173-360-385 through 173-360-398 at the end of the twelve-month period unless the department or delegated agency provides an extension before expiration of the twelve-month temporary closure period. Owners and operators shall have a site assessment completed in accordance with WAC 173-360-390 before such an extension is applied for.

(5) Any active permits for those systems being temporarily closed shall be returned to the department within thirty days of completion of the temporary closure activities.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-380, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-380, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-380, filed 11/28/90, effective 12/29/90.]

WAC 173-360-385 Permanent closure and change-in-service. Permanent closure shall be completed by a certified UST supervisor.

(1) At least thirty days before beginning either permanent closure or a change-in-service under subsections (2) and (3) of this section, or within another reasonable time period determined by the department or delegated agency, owners and operators shall notify the department or delegated agency in writing of their intent to permanently close or make the change-in-service, unless such action is in response to corrective action. The site assessment required under WAC 173-360-390 shall be performed after notifying the department or delegated agency but before completion of the permanent closure or a change-in-service.

(2) Permanent closure shall be completed by a certified UST supervisor within sixty days after expiration of the thirty-day notice, unless a written request for an extension, explaining the reason for the request, is approved by the department or delegated agency. Any UST system not permanently closed by a compliance date that the UST system is subject to, shall be in compliance with the requirement associated with the compliance date, including the payment of fees. Any UST system not in compliance with any such requirement will be subject to the penalties described in WAC 173-360-170.

(3) To permanently close an UST system, the certified UST supervisor shall empty and clean the tank by removing all liquids and accumulated sludges.

Note: Any sludges removed must also be designated and disposed of in accordance with chapter 173-303 WAC.

(4) All tanks taken out of service permanently shall also be either removed from the ground or filled with an inert solid material. All piping shall either be capped (except any vent lines) or removed from the ground.

(5) Continued use of an UST system to store a nonregulated substance is considered a change-in-service. Before a change-in-service, owners and operators shall have a certified UST supervisor empty and clean the tank by removing all liquid and accumulated sludge, and shall have a site assessment conducted in accordance with WAC 173-360-390.

Note: The following cleaning and closure procedures may be used to comply with this section:

(A) American Petroleum Institute Recommended Practice 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks";

(B) American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks";

(C) American Petroleum Institute Recommended Practice 1631, "Interior Lining of Underground Storage Tanks," may be used as guidance for compliance with this section; and

(D) The National Institute for Occupational Safety and Health "Criteria for a Recommended Standard...Working in Confined Space" may be used as guidance for conducting safe closure procedures at some hazardous substance tanks.

(6) Owners and operators are responsible for submitting checklists for any of the tank services described in this section. Any active tank permits for the systems being closed

shall be returned to the department within thirty days of closure activities.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-385, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-385, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-385, filed 11/28/90, effective 12/29/90.]

WAC 173-360-390 Site assessment at closure or change-in-service. (1) Before permanent closure or a change-in-service is completed, except as specified in subsections (2), (3), and (4) of this section, owners and operators shall have a person registered by the department to perform site assessments, as specified in WAC 173-360-610, sample for the presence of a release. Such samples shall be taken, analyzed, and the results reported to the department or delegated agency in accordance with the department's guidance document for site assessments, or as otherwise directed by the department or delegated agency, where contamination is most likely to be present at the UST site.

(2) The requirements of this section are satisfied if one of the external release detection methods allowed in WAC 173-360-345 (6)(f) and (g) is employed for the UST system being closed or undergoing a change-in-service, if the following conditions are met:

(a) The external release detection method is operating, at the time of closure or change-in-service, in accordance with the requirements of WAC 173-360-345 (6)(f) or (g), as applicable; and

(b) A report is provided to the department with sufficient information to clearly demonstrate that:

(i) The external release detection method employed was appropriately designed, installed, and operated to adequately detect any releases from the UST system; and

(ii) No release was detected from the UST system.

(3) If the department determines that the conditions specified in subsection (2)(a) and (b) of this section have not been satisfactorily met, the department may require that a site assessment be performed for the site.

(4) If contaminated soils, contaminated ground water, or free product is discovered under subsection (1) of this section, or by any other manner, owners and operators shall report to the department or delegated agency in accordance with WAC 173-360-372 and take appropriate action in accordance with WAC 173-360-399.

(5) Persons who perform site assessments shall certify that such site assessments comply with the requirements of this section by submitting the appropriate checklist to the department in accordance with WAC 173-360-630(12).

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-390, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-390, filed 11/28/90, effective 12/29/90.]

WAC 173-360-395 Applicability to previously closed UST systems. When directed by the department or delegated agency, the owner or operator of an UST system permanently closed or abandoned before December 22, 1988, shall have a person registered to perform site assessments assess the site and shall have a licensed tank services provider close the UST system in accordance with WAC 173-360-380 through 173-360-398 if releases from the UST may, in the judgment of the department or delegated agency, pose a current or potential threat to human health and the environment.

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-395, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-395, filed 11/28/90, effective 12/29/90.]

WAC 173-360-398 Closure records. Owners and operators shall maintain records that demonstrate compliance with closure requirements under WAC 173-360-380 through 173-360-398. The results of the site assessment required in WAC 173-360-390 shall be maintained for at least five years after completion of permanent closure or change-in-service in one of the following ways:

(1) By the owners and operators who took the UST system out of service;

(2) By the current owners and operators of the UST system site; or

(3) By mailing these records to the department or delegated agency if they cannot be maintained at the closed facility.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-398, filed 11/28/90, effective 12/29/90.]

WAC 173-360-399 Corrective action requirements. Except as provided in WAC 173-360-375, upon confirmation of a release in accordance with WAC 173-360-370 or 173-360-390, or after a release from the UST system is identified in any other manner, owners and operators shall immediately undertake appropriate measures in accordance with chapter 173-340 WAC and/or this chapter, and any additional measures as directed by the department under chapter 90.48 RCW. Owners and operators shall also report such releases to the department or delegated agency within twenty-four hours in accordance with WAC 173-360-372.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-399, filed 11/28/90, effective 12/29/90.]

PART IV
FINANCIAL RESPONSIBILITY REQUIREMENTS

WAC 173-360-400 Applicability. (1) WAC 173-360-400 through 173-360-499 applies to owners and operators of all petroleum underground storage tank (UST) systems except as otherwise provided in this section.

(2) Owners and operators of petroleum UST systems are subject to these requirements if they are in operation on or after the date for compliance established in WAC 173-360-403.

(3) State and federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States are exempt from the requirements of WAC 173-360-400 through 173-360-499.

(4) The requirements of WAC 173-360-400 through 173-360-499 do not apply to owners and operators of any UST system described in WAC 173-360-110 (2) or (3).

(5) If the owner and operator of a petroleum underground storage tank are separate persons, only one person is required to demonstrate financial responsibility; however, both parties are liable in event of noncompliance. Regardless of which party complies, the date set for compliance at a par-

ticular facility is determined by the characteristics of the owner as set forth in WAC 173-360-403.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-400, filed 11/28/90, effective 12/29/90.]

WAC 173-360-403 Compliance dates. Owners of petroleum underground storage tanks are required to comply with the requirements of WAC 173-360-400 through 173-360-499 by the following dates:

(1) All petroleum marketing firms owning 1,000 or more USTs and all other UST owners that report a tangible net worth of twenty million dollars or more to the United States Securities and Exchange Commission (SEC), Dun and Bradstreet, the Energy Information Administration, or the Rural Electrification Administration; January 24, 1989, except that compliance with WAC 173-360-410 (2) is required by July 24, 1989.

(2) All petroleum marketing firms owning 100-999 USTs; October 26, 1989.

(3) All petroleum marketing firms owning a combined total of 13-99 USTs which are located at more than one facility; April 26, 1991.

(4) All petroleum UST owners not described in subsections (1), (2), or (3) of this section, including all local government entities; the same as the requirements and deadlines adopted under 40 C.F.R. 280.91.

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-403, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-403, filed 11/28/90, effective 12/29/90.]

WAC 173-360-406 Amount and scope of required financial responsibility. (1) Owners or operators of petroleum underground storage tanks shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least the following per-occurrence amounts:

(a) For owners or operators of petroleum underground storage tanks that are located at petroleum marketing facilities, or that handle an average of more than ten thousand gallons of petroleum per month based on annual throughput for the previous calendar year; one million dollars.

(b) For all other owners or operators of petroleum underground storage tanks; five hundred thousand dollars.

(2) Owners or operators of petroleum underground storage tanks shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least the following annual aggregate amounts:

(a) For owners or operators of 1 to 100 petroleum underground storage tanks, one million dollars; and

(b) For owners or operators of 101 or more petroleum underground storage tanks, two million dollars.

(3) For the purposes of subsections (2) and (4) of this section only, "a petroleum underground storage tank" means a single containment unit and does not mean combinations of single containment units.

(4) Owners or operators shall review the amount of aggregate assurance provided whenever additional petroleum underground storage tanks are acquired or installed. If the number of petroleum underground storage tanks for which assurance must be provided exceeds one hundred, the owner or operator shall demonstrate financial responsibility in the amount of at least two million dollars of annual aggregate assurance by the anniversary of the date on which the mechanism demonstrating financial responsibility became effective. If assurance is being demonstrated by a combination of mechanisms, the owner or operator shall demonstrate financial responsibility in the amount of at least two million dollars of annual aggregate assurance by the first-occurring effective date anniversary of any one of the mechanisms combined (other than a financial test or guarantee) to provide assurance.

(5) The amounts of assurance required under this section exclude legal defense costs.

(6) The required per-occurrence and annual aggregate coverage amounts do not in any way limit the liability of the owner or operator.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-406, filed 11/28/90, effective 12/29/90.]

WAC 173-360-410 Allowable mechanisms and combinations of mechanisms. (1) Subject to the limitations of subsections (2) and (3) of this section, an owner or operator may use any one or combination of the mechanisms listed in WAC 173-360-413 through 173-360- 436 to demonstrate financial responsibility under WAC 173-360-400 through 173-360-499 for one or more underground storage tanks.

(2) An owner or operator may use a guarantee or surety bond to establish financial responsibility under WAC 173-360-400 through 173-360-499.

(3) An owner or operator may use self-insurance in combination with a guarantee only if, for the purpose of meeting the requirements of the financial test under this rule, the financial statements of the owner or operator are not consolidated with the financial statements of the guarantor.

(4) Except as provided in subsection (5) of this section, if the owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for:

(a) Taking corrective action;

(b) Compensating third parties for bodily injury and property damage caused by sudden accidental releases; or

(c) Compensating third parties for bodily injury and property damage caused by nonsudden accidental releases, the amount of assurance provided by each mechanism or combination of mechanisms shall be in the full amount specified in WAC 173-360-406 (1) and (2).

(5) If an owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for different petroleum underground storage tanks, the annual aggregate required shall be based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-410, filed 11/28/90, effective 12/29/90.]

WAC 173-360-413 Financial test of self-insurance. (1) An owner or operator, and/or guarantor, may satisfy the requirements of WAC 173-360-406 by passing a financial test as specified in this section. To pass the financial test of self-insurance, the owner or operator, and/or guarantor shall meet the criteria of subsection (2) or (3) of this section based on year-end financial statements for the latest completed fiscal year.

(2)(a) The owner or operator, and/or guarantor, must have a tangible net worth of at least ten times:

(i) The total of the applicable aggregate amount required by WAC 173-360-406, based on the number of underground storage tanks for which a financial test is used to demonstrate financial responsibility to the department under this section;

(ii) The sum of the corrective action cost estimates, the current closure and post-closure care cost estimates, and amount of liability coverage for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR Parts 264.101, 264.143, 264.145, 265.143, 265.145, 264.147, and 265.147 or to a state agency under a state program authorized by EPA under Part 271; and

(iii) The sum of current plugging and abandonment cost estimates for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR Part 144.63 or to a state agency under a state program authorized by EPA under 40 CFR Part 145.

Note: Titles of the above-referenced CFR citations are as follows: Part 264.101 - Corrective Action for Solid Waste Management Units; Part 264.143 - Financial Assurance for Closure; Part 264.145 - Financial Assurance for Post-Closure Care; Part 265.143 - Financial Assurance for Closure; Part 265.145 - Financial Assurance for Post-Closure Care; Part 264.147 - Liability Requirements; Part 265.147 - Liability Requirements; Part 144.63 - Financial Assurance for Plugging and Abandonment; and Part 145 - State UIC Program Requirements.

(b) The owner or operator, and/or guarantor, must have a tangible net worth of at least ten million dollars.

(c) The owner or operator, and/or guarantor, shall have a letter signed by the chief financial officer as specified in subsection (4) of this section and as set forth in WAC 173-360-470.

(d) The owner or operator, and/or guarantor, shall either:

(i) File financial statements annually with the United States Securities and Exchange Commission, the Energy Information Administration, or the Rural Electrification Administration; or

(ii) Report annually the firm's tangible net worth to Dun and Bradstreet, and Dun and Bradstreet must have assigned the firm a financial strength rating of 4A or 5A.

(e) The firm's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.

(3)(a) The owner or operator, and/or guarantor shall meet the financial test requirements of 40 CFR 264.147 (f)(1), substituting the appropriate amounts specified in WAC 173-360-406 (2)(a) and (b) for the "amount of liability coverage" each time specified in that section.

(b) The fiscal year-end financial statements of the owner or operator, and/or guarantor, shall be examined by an independent certified public accountant and be accompanied by the accountant's report of the examination.

(c) The firm's year-end financial statements cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.

(d) The owner or operator, and/or guarantor, shall have a letter signed by the chief financial officer, worded as specified in subsection (4) of this section.

(e) If the financial statements of the owner or operator, and/or guarantor, are not submitted annually to the United States Securities and Exchange Commission, the Energy Information Administration or the Rural Electrification Administration, the owner or operator, and/or guarantor, shall obtain a special report by an independent certified public accountant stating that:

(i) He or she has compared the data that the letter from the chief financial officer specifies as having been derived from the latest year-end financial statements of the owner or operator, and/or guarantor, with the amounts in such financial statements; and

(ii) In connection with that comparison, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) To demonstrate that it meets the financial test under subsection (2) or (3) of this section, the chief financial officer of the owner or operator, and/or guarantor, shall sign, within one hundred twenty days of the close of each financial reporting year, as defined by the twelve-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as set forth in WAC 173-360-470, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted.

(5) If an owner or operator using the test to provide financial assurance finds that he or she no longer meets the requirements of the financial test based on the year-end financial statements, the owner or operator shall obtain alternative coverage within one hundred fifty days of the end of the year for which financial statements have been prepared.

(6) The director may require reports of financial condition at any time from the owner or operator, and/or guarantor. If the director finds, on the basis of such reports or other information, that the owner or operator, and/or guarantor, no longer meets the financial test requirements of WAC 173-360-413 (2) or (3) and (4), the owner or operator shall obtain alternate coverage within thirty days after notification of such a finding.

(7) If the owner or operator fails to obtain alternate assurance within one hundred fifty days of finding that he or she no longer meets the requirements of the financial test based on the year-end financial statements, or within thirty days of notification by the director that he or she no longer meets the requirements of the financial test, the owner or operator shall notify the director of such failure within ten days.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-413, filed 11/28/90, effective 12/29/90.]

WAC 173-360-416 Guarantee. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by

obtaining a guarantee that conforms to the requirements of this section. The guarantor shall be:

(a) A firm that:

(i) Possesses a controlling interest in the owner or operator;

(ii) Possesses a controlling interest in a firm described under (a)(i) of this subsection; or

(iii) Is controlled through stock ownership by a common parent firm that possesses a controlling interest in the owner or operator; or

(b) A firm engaged in a substantial business relationship with the owner or operator and issuing the guarantee as an act incident to that business relationship.

(2) Within one hundred twenty days of the close of each financial reporting year the guarantor shall demonstrate that it meets the financial test criteria of WAC 173-360-413 based on year-end financial statements for the latest completed financial reporting year by completing the letter from the chief financial officer described in WAC 173-360-413(4) and shall deliver the letter to the owner or operator. If the guarantor fails to meet the requirements of the financial test at the end of any financial reporting year, within one hundred twenty days of the end of that financial reporting year the guarantor shall send by certified mail, before cancellation or nonrenewal of the guarantee, notice to the owner or operator. If the director notifies the guarantor that he no longer meets the requirements of the financial test of WAC 173-360-413 (2) or (3) and (4), the guarantor shall notify the owner or operator within ten days of receiving such notification from the director. In both cases, the guarantee will terminate no less than one hundred twenty days after the date the owner or operator receives the notification, as evidenced by the return receipt. The owner or operator shall obtain alternate coverage as specified in WAC 173-360-460(3).

(3) The guarantee shall be worded as set forth is WAC 173-360-473, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

(4) An owner or operator who uses a guarantee to satisfy the requirements of WAC 173-360-406 shall establish a standby trust fund when the guarantee is obtained. Under the terms of the guarantee, all amounts paid by the guarantor under the guarantee will be deposited directly into the standby trust fund in accordance with instructions from the director under WAC 173-360-453. This standby trust fund shall meet the requirements specified in WAC 173-360-436.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-416, filed 11/28/90, effective 12/29/90.]

WAC 173-360-420 Insurance and risk retention group coverage. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by obtaining liability insurance that conforms to the requirements of this section from a qualified insurer or risk retention group. Such insurance may be in the form of a separate insurance policy or an endorsement to an existing insurance policy.

(2) Each insurance policy shall be amended by an endorsement worded as specified in WAC 173-360-476 or evidenced by a certificate of insurance worded as specified in WAC 173-360-480, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

(3) Each insurance policy shall be issued by an insurer or a risk retention group that, at a minimum, is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-420, filed 11/28/90, effective 12/29/90.]

WAC 173-360-423 Surety bond. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by obtaining a surety bond that conforms to the requirements of this section. The surety company issuing the bond shall be among those listed as acceptable sureties on federal bonds in the latest Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall be worded as set forth in WAC 173-360-483, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

(3) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. In all cases, the surety's liability is limited to the per-occurrence and annual aggregate penal sums.

(4) The owner or operator who uses a surety bond to satisfy the requirements of WAC 173-360-406 shall establish a standby trust fund when the surety bond is acquired. Under the terms of the bond, all amounts paid by the surety under the bond will be deposited directly into the standby trust fund in accordance with instructions from the director under WAC 173-360-453. This standby trust fund shall meet the requirements specified in WAC 173-360-436.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-423, filed 11/28/90, effective 12/29/90.]

WAC 173-360-426 Letter of credit. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by obtaining an irrevocable standby letter of credit that conforms to the requirements of this section. The issuing institution shall be an entity that has the authority to issue letters of credit in Washington state and whose letter-of-credit operations are regulated and examined by a federal or state agency.

(2) The letter of credit shall be worded as set forth in WAC 173-360-486, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

(3) An owner or operator who uses a letter of credit to satisfy the requirements of WAC 173-360-406 shall also establish a standby trust fund when the letter of credit is acquired. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the director will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the director under WAC 173-360-453. This standby trust fund shall meet the requirements specified in WAC 173-360-436.

(4) The letter of credit shall be irrevocable with a term specified by the issuing institution. The letter of credit shall provide that credit be automatically renewed for the same term as the original term, unless, at least one hundred twenty

days before the current expiration date, the issuing institution notifies the owner or operator by certified mail of its decision not to renew the letter of credit. Under the terms of the letter of credit, the one hundred twenty days will begin on the date when the owner or operator receives the notice, as evidenced by the return receipt.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-426, filed 11/28/90, effective 12/29/90.]

WAC 173-360-433 Trust fund. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by establishing a trust fund that conforms to the requirements of this section. The trustee shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(2) The wording of the trust agreement shall be identical to the wording specified in WAC 173-360-490, and shall be accompanied by a formal certification of acknowledgment as specified in WAC 173-360-493.

(3) The trust fund, when established, shall be funded for the full required amount of coverage, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining required coverage.

(4) If the value of the trust fund is greater than the required amount of coverage, the owner or operator may submit a written request to the director for release of the excess.

(5) If other financial assurance as specified in WAC 173-360-400 through 173-360-499 is substituted for all or part of the trust fund, the owner or operator may submit a written request to the director for release of the excess.

(6) Within sixty days after receiving a request from the owner or operator for release of funds as specified in subsections (4) or (5) of this section, the director will instruct the trustee to release to the owner or operator such funds as the director specifies in writing.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-433, filed 11/28/90, effective 12/29/90.]

WAC 173-360-436 Standby trust fund. (1) An owner or operator using any one of the mechanisms authorized by WAC 173-360-416, 173-360-423, or 173-360-426 shall establish a standby trust fund when the mechanism is acquired. The trustee of the standby trust fund must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(2)(a) The standby trust agreement or trust agreement shall be worded as set forth in WAC 173-360-490, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

(b) The standby trust agreement or trust agreement shall be accompanied by a formal certification of acknowledgment similar to that set forth in WAC 173-360-493.

(3) The director will instruct the trustee to refund the balance of the standby trust fund to the provider of financial assurance if the director determines that no additional corrective action costs or third-party liability claims will occur as a result of a release covered by the financial assurance mechanism for which the standby trust fund was established.

(4) An owner or operator may establish one trust fund as the depository mechanism for all funds assured in compliance with this rule.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-436, filed 11/28/90, effective 12/29/90.]

WAC 173-360-440 Substitution of financial assurance mechanisms by owner or operator. (1) An owner or operator may substitute any alternate financial assurance mechanisms as specified in WAC 173-360-400 through 173-360-499, provided that at all times he maintains an effective financial assurance mechanism or combination of mechanisms that satisfies the requirements of WAC 173-360-406.

(2) After obtaining alternate financial assurance as specified in WAC 173-360-400 through 173-360-499, an owner or operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance in accordance with requirements for cancellation set forth for the specific mechanism in WAC 173-360-470 through 173-360-490.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-440, filed 11/28/90, effective 12/29/90.]

WAC 173-360-443 Cancellation or nonrenewal by a provider of financial assurance. (1) Except as otherwise provided, a provider of financial assurance may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner or operator.

(a) Termination of a guarantee, a surety bond, or a letter of credit may not occur until one hundred twenty days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(b) Termination of insurance or risk retention group coverage, except for nonpayment or misrepresentation by the insured, or state-funded assurance may not occur until sixty days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt. Termination for nonpayment of premium or misrepresentation by the insured may not occur until a minimum of ten days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(2) If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider as specified in WAC 173-360-446, the owner or operator shall obtain alternate coverage as specified in this section within sixty days after receipt of the notice of termination. If the owner or operator fails to obtain alternate coverage within sixty days after receipt of the notice of termination, the owner or operator shall notify the director of such failure and submit:

(a) The name and address of the provider of financial assurance;

(b) The effective date of termination; and

(c) The evidence of the financial assurance mechanism subject to the termination maintained in accordance with WAC 173-360-450(2).

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-443, filed 11/28/90, effective 12/29/90.]

WAC 173-360-446 Reporting by owner or operator. (1) An owner or operator shall submit the appropriate forms listed in WAC 173-360-450(2) documenting current evidence of financial responsibility to the director:

(a) Within thirty days after the owner or operator identifies a release from an underground storage tank required to be reported under WAC 173-360-372, 173-360-375 or 173-360-399;

(b) If the owner or operator fails to obtain alternate coverage as required by WAC 173-360-400 through 173-360-499, within thirty days after the owner or operator receives notice of:

(i) Commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor, (ii) Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism, (iii) Failure of a guarantor to meet the requirements of the financial test, (iv) Other incapacity of a provider of financial assurance; or

(c) As required by WAC 173-360-413(7) and 173-360-443(2).

(2) An owner or operator shall certify compliance with the financial responsibility requirements of WAC 173-360-400 through 173-360-499 as specified in the new tank notification form when notifying the appropriate state or local agency of the installation of a new underground storage tank under WAC 173-360-200.

(3) The director may require an owner or operator to submit evidence of financial assurance as described in WAC 173-360-450(2) or other information relevant to compliance with WAC 173-360-400 through 173-360-499 at any time.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-446, filed 11/28/90, effective 12/29/90.]

WAC 173-360-450 Recordkeeping. (1) Owners or operators shall maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under WAC 173-360-400 through 173-360-499 for an underground storage tank until released from the requirements of WAC 173-360-400 through 173-360-499 under 173-360-456. An owner or operator shall maintain such evidence at the underground storage tank site or the owner's or operator's place of business. Records maintained off-site shall be made available upon request of the department or delegated agency.

(2) An owner or operator shall maintain the following types of evidence of financial responsibility:

(a) An owner or operator using an assurance mechanism specified in WAC 173-360-413 through 173-360-433 shall maintain a copy of the instrument worded as specified.

(b) An owner or operator using a financial test or guarantee shall maintain a copy of the chief financial officer's letter based on year-end financial statements for the most recent completed financial reporting year. Such evidence shall be on file no later than one hundred twenty days after the close of the financial reporting year.

(c) An owner or operator using a guarantee, surety bond, or letter of credit shall maintain a copy of the signed standby trust fund agreement and copies of any amendments to the agreement.

(d) An owner or operator using an insurance policy or risk retention group coverage shall maintain a copy of the signed insurance policy or risk retention group coverage policy, with the endorsement or certificate of insurance and any amendments to the agreements.

(e) An owner or operator covered by a financial assurance program shall maintain on file a copy of any evidence of coverage supplied by or required by the state.

(f) An owner or operator using an assurance mechanism specified in WAC 173-360-413 through 173-360-433 shall maintain an updated copy of a certification of financial responsibility worded as set forth in WAC 173-360-496, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

The owner or operator shall update this certification whenever the financial assurance mechanism(s) used to demonstrate financial responsibility change(s).

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-450, filed 11/28/90, effective 12/29/90.]

WAC 173-360-453 Drawing on financial assurance mechanisms. (1) The director shall require the guarantor, surety, or institution issuing a letter of credit to place the amount of funds stipulated by the director, up to the limit of funds provided by the financial assurance mechanism, into the standby trust if:

(a)(i) The owner or operator fails to establish alternate financial assurance within sixty days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or, as applicable, other financial assurance mechanism; and

(ii) The director determines or suspects that a release from an underground storage tank covered by the mechanism has occurred and so notifies the owner or operator or the owner or operator has notified the director pursuant to WAC 173-360-360 through 173-360-375 or 173-360-399 of a release from an underground storage tank covered by the mechanism; or

(b) The conditions of subsection (2)(a), (b)(i) or (ii) of this section are satisfied.

(2) The director may draw on a standby trust fund when:

(a) The director makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and the owner or operator, after appropriate notice and opportunity to comply, has not conducted corrective action as required under WAC 173-360-399; or

(b) The director has received either:

(i) Certification from the owner or operator and the third-party liability claimant(s) and from attorneys representing the owner or operator and the third-party liability claimant(s) that a third-party liability claim should be paid. The certification shall be worded as set forth in WAC 173-360-499, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted; or

(ii) A valid final court order establishing a judgment against the owner or operator for bodily injury or property damage caused by an accidental release from an underground storage tank covered by financial assurance under WAC 173-360-400 through 173-360-499 and the director determines that the owner or operator has not satisfied the judgment.

(3) If the director determines that the amount of corrective action costs and third-party liability claims eligible for payment under subsection (2) of this section may exceed the balance of the standby trust fund and the obligation of the provider of financial assurance, the first priority for payment shall be corrective action costs necessary to protect human health and the environment. The director shall pay third-party liability claims in the order in which the director receives certifications under subsection (2)(b)(i) of this section and valid court orders under subsection (2)(b)(ii) of this section.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-453, filed 11/28/90, effective 12/29/90.]

WAC 173-360-456 Release from the requirements. An owner or operator is no longer required to maintain financial responsibility under WAC 173-360-400 through 173-360-499 for an underground storage tank after the tank has been properly closed or, if corrective action is required, after corrective action has been completed and the tank has been properly closed as required by WAC 173-360-380 through 173-360-398.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-456, filed 11/28/90, effective 12/29/90.]

WAC 173-360-460 Bankruptcy or other incapacity of owner or operator. (1) Within ten days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming an owner or operator as debtor, the owner or operator shall notify the director by certified mail of such commencement and submit the appropriate forms listed in WAC 173-360-450(2) documenting current financial responsibility.

(2) Within ten days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing financial assurance as debtor, such guarantor shall notify the owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in WAC 173-360-416.

(3) An owner or operator who obtains financial assurance by a mechanism other than the financial test of self-insurance will be deemed to be without the required financial assurance in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of financial assurance to issue a guarantee, insurance policy, risk retention group coverage policy, surety bond, or letter of credit. The owner or operator shall obtain alternate financial assurance as specified in WAC 173-360-400 through 173-360-499 within thirty days after receiving notice of such an event. If the owner or operator does not obtain alternate coverage within thirty days after such notification, he shall notify the director.

(4) Within thirty days after receipt of notification that a state fund or other state assurance has become incapable of paying for assured corrective action or third-party compensation costs, the owner or operator shall obtain alternate financial assurance.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-460, filed 11/28/90, effective 12/29/90.]

WAC 173-360-463 Replenishment of guarantees, letters of credit, or surety bonds. (1) If at any time after a standby trust is funded upon the instruction of the director with funds drawn from a guarantee, letter of credit, or surety bond, and the amount in the standby trust is reduced below the full amount of coverage required, the owner or operator shall by the anniversary date of the financial mechanism from which the funds were drawn:

(a) Replenish the value of financial assurance to equal the full amount of coverage required, or (b) Acquire another financial assurance mechanism for the amount by which funds in the standby trust have been reduced.

(2) For purposes of this section, the full amount of coverage required is the amount of coverage to be provided by WAC 173-360-406. If a combination of mechanisms was used to provide the assurance funds which were drawn upon, replenishment shall occur by the earliest anniversary date among the mechanisms.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-463, filed 11/28/90, effective 12/29/90.]

WAC 173-360-466 Suspension of enforcement. Reserved.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-466, filed 11/28/90, effective 12/29/90.]

WAC 173-360-470 Appendix A—Letter from chief financial officer.

LETTER FROM CHIEF FINANCIAL OFFICER

I am the chief financial officer of [insert: name and address of the owner or operator, or guarantor]. This letter is in support of the use of [insert: "the financial test of self-insurance," and/or "guarantee"] to demonstrate financial responsibility for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage"] caused by [insert: "sudden accidental releases" and/or "nonsudden accidental releases"] in the amount of at least [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate arising from operating (an) underground storage tank(s).

Underground storage tanks at the following facilities are assured by this financial test by this [insert: "owner or operator," and/or "guarantor"]: [List for each facility: The name and address of the facility where tanks assured by this financial test are located, and whether tanks are assured by this financial test. If separate mechanisms or combinations of mechanisms are being used to assure any of the tanks at this facility, list each tank assured by this financial test by the tank identification number provided in the notification submitted pursuant to WAC 173-360-200.]

A [insert: "financial test," and/or "guarantee"] is also used by this [insert: "owner or operator," or "guarantor"] to demonstrate evidence of financial responsibility in the following amounts under other EPA regulations or state programs authorized by EPA under 40 CFR Parts 271 and 145:

	Amount
EPA Regulations:	
Closure (264.143 and 265.143)	$
Post-Closure Care (264.145 and 265.145)	$
Liability Coverage (264.147 and 265.147)	$
Corrective Action (264.101(b))	$
Plugging and Abandonment (144.63)	$
	Amount
Authorized state programs:	
Closure	$
Post-Closure Care	$
Liability Coverage	$
Corrective Action	$
Plugging and Abandonment	$
TOTAL	$

This [insert: "owner or operator," or "guarantor"] has not received an adverse opinion, a disclaimer of opinion, or a "going concern" qualification from an independent auditor on his financial statements for the latest completed fiscal year.

[Fill in the information for Alternative I if the criteria of WAC 173-360-413(2) are being used to demonstrate compliance with the financial test requirements. Fill in the information for Alternative II if the criteria of WAC 173-360-413(3) are being used to demonstrate compliance with the financial test requirements.]

ALTERNATIVE I

1. Amount of annual UST aggregate coverage being assured by a financial test, and/or guarantee	$
2. Amount of corrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee	$
3. Sum of lines 1 and 2	$
4. Total tangible assets	$
5. Total liabilities [if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6]	$
6. Tangible net worth [subtract line 5 from line 4]	$
	Yes No
7. Is line 6 at least $10 million?	
8. Is line 6 at least 10 times line 3?	
9. Have financial statements for the latest fiscal year been filed with the Securities and Exchange Commission?	
10. Have financial statements for the latest fiscal year been filed with the Energy Information Administration?	
11. Have financial statements for the latest fiscal year been filed with the Rural Electrification Administration?	
12. Has financial information been provided to Dun and Bradstreet, and has Dun and Bradstreet provided a financial strength rating of 4A or 5A? [Answer "Yes" only if both criteria have been met]	

ALTERNATIVE II

1. Amount of annual UST aggregate coverage being assured by a financial test, and/or guarantee	$
2. Amount of corrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee	$
3. Sum of lines 1 and 2	$
4. Total tangible assets	$
5. Total liabilities [if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6]	$
6. Tangible net worth [subtract line 5 from line 4]	$
7. Total assets in the U.S. [required only if less than 90 percent of assets are located in the U.S.]	$
	Yes No
8. Is line 6 at least $10 million?	
9. Is line 6 at least 6 times line 3?	
10. Are at least 90 percent of assets located in the U.S.? [If "No," complete line 11]	
11. Is line 7 at least 6 times line 3?	
[Fill in either lines 12-15 or lines 16-18:]	
12. Current assets	$
13. Current liabilities	$
14. Net working capital [subtract line 13 from line 12]	$
	Yes No
15. Is line 14 at least 6 times line 3?	
16. Current bond rating of most recent bond issue	
17. Name of rating service	
18. Date of maturity of bond	
19. Have financial statements for the latest fiscal year been filed with the SEC, the Energy Information Administration, or the Rural Electrification Administration?	

[If "No," please attach a report from an independent certified public accountant certifying that there are no material differences between the data as reported in lines 4-18 above and the financial statements for the latest fiscal year.]

[For both Alternative I and Alternative II complete the certification with this statement.]

I hereby certify that the wording of this letter is identical to the wording specified in WAC 173-360-470 as such regulations were constituted on the date shown immediately below.

[Signature]
[Name]
[Title]
[Date]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-470, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-473 Appendix B—Guarantee.

GUARANTEE

Guarantee made this [date] by name of guaranteeing entity, a business entity organized under the laws of (name of state), herein referred to as guarantor, to the Washington state department of ecology and to any and all third parties, and obligees, on behalf of [owner or operator] of [business address].

Recitals.

(1) Guarantor meets or exceeds the financial test criteria of WAC 173-360-413 (2) or (3) and (4) and agrees to comply with the requirements for guarantors as specified in WAC 173-360-416(2).

(2) [Owner or operator] owns or operates the following underground storage tank(s) covered by this guarantee: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility.] This guarantee satisfies WAC 173-360-400 through 173-360-499 requirements for assuring funding for [insert: "Taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the above-identified underground storage tank(s) in the amount of [insert dollar amount] per occurrence and [insert dollar amount] annual aggregate.

(3) [Insert appropriate phrase: "On behalf of our subsidiary" (if guarantor is corporate parent of the owner or operator); "On behalf of our affiliate" (if guarantor is a related firm of the owner or operator); or "Incident to our business relationship with" (if guarantor is providing the guarantee as an incident to a substantial business relationship with owner or operator)] [owner or operator], guarantor guarantees to the Washington state department of ecology and to any and all third parties that:

In the event that [owner or operator] fails to provide alternate coverage within 60 days after receipt of a notice of cancellation of this guarantee and the director of the Washington state department of ecology has determined or suspects that a release has occurred at an underground storage tank covered by this guarantee, the guarantor, upon instructions from the director, shall fund a standby trust fund in accordance with the provisions of WAC 173-360-453, in an amount not to exceed the coverage limits specified above.

In the event that the director determines that [owner or operator] has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with WAC 173-360-399, the guarantor, upon written instructions from the director, shall fund a standby trust in accordance with the provisions of WAC 173-360-453, in an amount not to exceed the coverage limits specified above.

If [owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by ["sudden" and/or "nonsudden"] accidental releases arising from the operation of the above-identified tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor, upon written instructions from the director, shall fund a standby trust in accordance with the provisions of WAC 173-360-453 to satisfy such judgment(s), award(s), or settlement agreement(s) up to the limits of coverage specified above.

(4) Guarantor agrees that if, at the end of any fiscal year before cancellation of this guarantee, the guarantor fails to meet the financial test criteria of WAC 173-360-413 (2) or (3) and (4), guarantor shall send within 120 days of such failure, by certified mail, notice to [owner or operator]. The guarantee will terminate 120 days from the date of receipt of the notice by [owner or operator], as evidenced by the return receipt.

(5) Guarantor agrees to notify [owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

(6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [owner or operator] pursuant to chapter 173-360 WAC.

(7) Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] shall comply with the applicable financial responsibility requirements of WAC 173-360-400 through 173-360-499 for the above-identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [owner or operator], as evidenced by the return receipt.

(8) The guarantor's obligation does not apply to any of the following:

(a) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily damage or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of WAC 173-360-406.

(9) Guarantor expressly waives notice of acceptance of this guarantee by the Washington state department of ecology, by any or all third parties, or by [owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in WAC 173-360-473 as such regulations were constituted on the effective date shown immediately below.

Effective date:

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-473, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-473, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-476 Appendix C—Endorsement.

ENDORSEMENT

Name: [Name of each covered location]

Address: [Address of each covered location]

Policy Number:

Period of Coverage: [Current policy period]

Name of [insurer or risk retention group]:

Address of [insurer or risk retention group]:

Name of insured:

Address of insured:

Endorsement:

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering the following underground storage tanks:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility.]

for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental release"; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the insurer's or group's liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

a. Bankruptcy or insolvency of the insured shall not relieve the ["insurer" or "group"] of its obligations under the policy to which this endorsement is attached.

b. The ["insurer" or "group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement by the insured for any such payment made by the ["insurer" or "group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in WAC 173-360-413 through 173-360-433.

c. Whenever requested by the director of the Washington state department of ecology, the ["insurer" or "group"] agrees to furnish to the director a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the ["insurer" or "group"], except for nonpayment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for nonpayment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured.

[Insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the ["insurer" or "group"] within six months of the effective date of cancellation or nonrenewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in WAC 173-360-476 and that the ["insurer" or "group"] is ["licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states"].

[Signature of authorized representative of insurer or risk retention group]

[Name of person signing]

[Title of person signing], Authorized Representative of [name of insurer or risk retention group]

[Address of representative]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-476, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-480 Appendix D—Certificate of insurance.

CERTIFICATE OF INSURANCE

Name: [Name of each covered location]
Address: [Address of each covered location]
Policy number:
Endorsement (if applicable):
Period of coverage: [Current policy period]
Name of [insurer or risk retention group]:
Address of [insurer or risk retention group]:
Name of insured:
Address of insured:
Certification:

1. [Name of insurer or risk retention group], [the "insurer" or "group"], as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s):

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility].

for [insert: "Taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the insurer's or group's liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The ["insurer" or "group"] further certifies the following with respect to the insurance described in Paragraph 1:

a. Bankruptcy or insolvency of the insured shall not relieve the ["insurer" or "group"] of its obligations under the policy to which this certificate applies.

b. The ["insurer" or "group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement by the insured for any such payment made by the ["insurer" or "group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in WAC 173-360-413 through 173-360-433.

c. Whenever requested by the director of the Washington state department of ecology, the ["insurer" or "group"] agrees to furnish the director a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the ["insurer" or "group"], except for nonpayment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for nonpayment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such notice is received by the insured.

[Insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the ["insurer" or "group"] within six months of the effective date of the cancellation or nonrenewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in WAC 173-360-480 and that the ["insurer" or "group"] is ["licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states"].

[Signature of authorized representative of insurer]
[Type name]
[Title], authorized representative of [name of insurer or risk retention group]
[Address of representative]

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-480, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-480, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-483 Appendix E—Performance bond.

PERFORMANCE BOND

Date bond executed:
Period of coverage:
Principal: [Legal name and business address of owner or operator]
Type of organization: [Insert "individual," "joint venture," "partnership," or "corporation"]
State of incorporation (if applicable):
Surety(ies): [Name(s) and business address(es)]
Scope of coverage: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility. List the coverage guaranteed by the bond: "Taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental

releases" or "nonsudden accidental releases" or "accidental releases" "arising from operating the underground storage tank"].

Penal sums of bond:

Per occurrence $

Annual aggregate $

Surety's bond number:

Know All Persons by These Presents, that we, the principal and surety(ies), hereto are firmly bound to the Washington state department of ecology, in the above penal sums for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sums jointly and severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each surety binds itself, jointly and severally with the principal, for the payment of such sums only as is set forth opposite the name of such surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sums.

Whereas said principal is required under Subtitle I of the Resource Conservation and Recovery Act (RCRA), as amended, to provide financial assurance for [insert: "Taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tanks identified above, and

Whereas said principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, therefore, the conditions of the obligation are such that if the principal shall faithfully ["take corrective action, in accordance with WAC 173-360-399 and the director of the Washington state department of ecology's instructions for," and/or "compensate injured third parties for bodily injury and property damage caused by" either "sudden" or "nonsudden" or "sudden and nonsudden"] accidental releases arising from operating the tank(s) identified above, or if the principal shall provide alternate financial assurance, as specified in WAC 173-360-400 through 173-360-499, within 120 days after the date the notice of cancellation is received by the principal from the surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

Such obligation does not apply to any of the following:

(1) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(2) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(3) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(4) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(5) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of WAC 173-360-406.

The surety(ies) shall become liable on this bond obligation only when the principal has failed to fulfill the conditions described above.

Upon notification by the director of the Washington state department of ecology that the principal has failed to ["take corrective action, in accordance with WAC 173-360-399 and the director's instructions" and/or "compensate injured third parties"] as guaranteed by this bond, the surety(ies) shall either perform ["corrective action in accordance with WAC 173-360-399 and the director's instructions" and/or "third-party liability compensation"] or place funds in an amount up to the annual aggregate penal sum into the standby trust fund as directed by the director under WAC 173-360-453.

Upon notification by the director that the principal has failed to provide alternate financial assurance within 60 days after the date the notice of cancellation is received by the principal from the surety(ies) and that the director has determined or suspects that a release has occurred, the surety(ies) shall place funds in an amount not exceeding the annual aggregate penal sum into the standby trust fund as directed by the director under WAC 173-360-453.

The surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the annual aggregate to the penal sum shown on the face of the bond, but in no event shall the obligation of the surety(ies) hereunder exceed the amount of said annual aggregate penal sum.

The surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the principal, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the principal, as evidenced by the return receipt.

The principal may terminate this bond by sending written notice to the surety(ies).

In witness thereof, the principal and surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the principal and surety(ies) and that the wording of this surety bond is identical to the wording specified in WAC 173-360-483 as such regulations were constituted on the date this bond was executed.

PRINCIPAL

[Signature(s)]

[Name(s)]

[Title(s)]
[Corporate seal]

CORPORATE SURETY(IES)

[Name and address]
[State of incorporation:
[Liability limit: $
[Signature(s)]
[Name(s) and title(s)]
[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for surety above.]

Bond premium: $

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-483, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-486 Appendix F—Irrevocable standby letter of credit.

IRREVOCABLE STANDBY LETTER OF CREDIT

[Name and address of issuing institution]

[Name and address of director of the Washington state department of ecology]

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. . . . . in your favor, at the request and for the account of [owner or operator name] of [address] up to the aggregate amount of [in words] U.S. dollars ($[insert dollar amount]), available upon presentation of

(1) your sight draft, bearing reference to this letter of credit, No. . . . ., and

(2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of Subtitle I of the Resource Conservation and Recovery Act of 1976, as amended."

This letter of credit may be drawn on to cover [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"] arising from operating the underground storage tank(s) identified below in the amount of [in words] $[insert dollar amount] per occurrence and [in words] $[insert dollar amount] annual aggregate:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility.]

The letter of credit may not be drawn on to cover any of the following:

(a) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of WAC 173-360-406.

This letter of credit is effective as of [date] and shall expire on [date], but such expiration date shall be automatically extended for a period of [at least the length of the original term] on [expiration date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify [owner or operator] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event that [owner or operator] is so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by [owner or operator], as shown on the signed return receipt.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner or operator] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in WAC 173-360-486 as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]

[Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"].

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-486, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-490 Appendix G—Trust agreement.

TRUST AGREEMENT

Trust agreement, the "agreement," entered into as of [date] by and between [name of the owner or operator], a Washington state [insert "corporation," "partnership," "association," or "proprietorship"], the "grantor," and [name of corporate trustee], [insert "Incorporated in the state of Washington" or "a national bank"], the "trustee."

Whereas, the department of ecology, "ecology", an agency of the state of Washington, has established certain

regulations applicable to the grantor, requiring that an owner or operator of an underground storage tank shall provide assurance that funds will be available when needed for corrective action and third-party compensation for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from the operation of the underground storage tank. The attached Schedule A lists the number of tanks at each facility and the name(s) and addresses of the facility(ies) where the tanks are located that are covered by the standby trust agreement.

[Whereas, the grantor has elected to establish [insert either "a guarantee," "surety bond," or "letter of credit"] to provide all or part of such financial assurance for the underground storage tanks identified herein and is required to establish a standby trust fund able to accept payments from the instrument (This paragraph is only applicable to the standby trust agreement.)];

Whereas, the grantor, acting through its duly authorized officers, has selected the trustee to be the trustee under this agreement, and the trustee is willing to act as trustee;

Now, therefore, the grantor and the trustee agree as follows:

Section 1. Definitions. As used in this agreement:

(1) The term "grantor" means the owner or operator who enters into this agreement and any successors or assigns of the grantor.

(2) The term "trustee" means the trustee who enters into this agreement and any successor trustee.

Section 2. Identification of the Financial Assurance Mechanism. This agreement pertains to the [identify the financial assurance mechanism, either a guarantee, surety bond, or letter of credit, from which the standby trust fund is established to receive payments (This paragraph is only applicable to the standby trust agreement.)].

Section 3. Establishment of fund. The grantor and the trustee hereby establish a trust fund, the "fund," for the benefit of the Washington state department of ecology. The grantor and the trustee intend that no third party have access to the fund except as herein provided. [The fund is established initially as a standby to receive payments and shall not consist of any property.] Payments made by the provider of financial assurance pursuant to the director of the department of ecology's instruction are transferred to the trustee and are referred to as the fund, together with all earnings and profits thereon, less any payments or distributions made by the trustee pursuant to this agreement. The fund shall be held by the trustee, IN TRUST, as thereinafter provided. The trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the grantor as provider of financial assurance, any payments necessary to discharge any liability of the grantor established by the department of ecology.

Section 4. Payment for ["corrective action" and/or "third-party liability claims"]. The trustee shall make payments from the fund as the director of the department of ecology shall direct, in writing, to provide for the payment of the costs of [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"] arising from operating the tanks covered by the financial assurance mechanism identified in this agreement.

The fund may not be drawn upon to cover any of the following:

(a) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of WAC 173-360-406.

The trustee shall reimburse the grantor, or other persons as specified by the director from the fund for corrective action expenditures and/or third-party liability claims in such amounts as the director shall direct in writing. In addition, the trustee shall refund to the grantor such amounts as the director specifies in writing. Upon refund, such funds shall no longer constitute part of the fund as defined herein.

Section 5. Payments comprising the fund. Payments made to the trustee for the fund shall consist of cash and securities acceptable to the trustee.

Section 6. Trustee management. The trustee shall invest and reinvest the principal and income of the fund and keep the fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the grantor may communicate in writing to the trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the fund, the trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiaries and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(a) Securities or other obligations of the grantor, or any other owner or operator of the tanks, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(1), shall not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(b) The trustee is authorized to invest the fund in time or demand deposits of the trustee, to the extent insured by an agency of the federal or state government; and

(c) The trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and investment. The trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the fund to any common, commingled, or collective trust fund created by the trustee in which the fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the trustee. The trustee may vote such shares in its discretion.

Section 8. Express powers of trustee. Without in any way limiting the powers and discretions conferred upon the trustee by the other provisions of this agreement or by law, the trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the trustee shall at all times show that all such securities are part of the fund;

(d) To deposit any cash in the fund in interest-bearing accounts maintained or savings certificates issued by the trustee, in its separate corporate capacity, or in any other banking institution affiliated with the trustee, to the extent insured by an agency of the federal or state government; and

(e) To compromise or otherwise adjust all claims in favor of or against the fund.

Section 9. Taxes and expenses. All taxes of any kind that may be assessed or levied against or in respect of the fund and all brokerage commissions incurred by the fund shall be paid from the fund. All other expenses incurred by the trustee in connection with the administration of this trust, including fees for legal services rendered to the trustee, the compensation of the trustee to the extent not paid directly by the grantor, and all other proper charges and disbursements of the trustee shall be paid from the fund.

Section 10. Advice of counsel. The trustee may from time to time consult with counsel, who may be counsel to the grantor, with respect to any questions arising as to the construction of this agreement or any action to be taken hereunder. The trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. Trustee compensation. The trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the grantor.

Section 12. Successor trustee. The trustee may resign or the grantor may replace the trustee, but such resignation or replacement shall not be effective until the grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the trustee hereunder. Upon the successor trustee's acceptance of the appointment, the trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the fund. If for any reason the grantor cannot or does not act in the event of the resignation of the trustee, the trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in writing sent to the grantor and the present trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the trustee as a result of any of the acts contemplated by this section shall be paid as provided in section 9.

Section 13. Instructions to the trustee. All orders, requests, and instructions by the grantor to the trustee shall be in writing, signed by such persons as are designated in the attached Schedule B or such other designees as the grantor may designate by amendment to Schedule B. The trustee shall be fully protected in acting without inquiry in accordance with the grantor's orders, requests, and instructions. All orders, requests, and instructions by the director of the Washington state department of ecology to the trustee shall be in writing, signed by the director, and the trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the grantor or the director, hereunder has occurred. The trustee shall have no duty to act in the absence of such orders, requests, and instructions from the grantor and/or the director, except as provided for herein.

Section 14. Amendment of agreement. This agreement may be amended by an instrument in writing executed by the grantor and the trustee, or by the trustee and the director of the department of ecology, if the grantor ceases to exist.

Section 15. Irrevocability and termination. Subject to the right of the parties to amend this agreement as provided in Section 14, this trust shall be irrevocable and shall continue until terminated at the written direction of the grantor and the trustee, or by the trustee and the director of the department of ecology, if the grantor ceases to exist. Upon termination of the trust, all remaining trust property, less final trust administration expenses, shall be delivered to the grantor.

Section 16. Immunity and indemnification. The trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this trust, or in carrying out any directions by the

grantor or the director of the department of ecology, issued in accordance with this agreement. The trustee shall be indemnified and saved harmless by the grantor, from and against any personal liability to which the trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the grantor fails to provide such defense.

Section 17. Choice of law. This agreement shall be administered, construed, and enforced according to the laws of the state of Washington, or the Comptroller of the Currency in the case of National Association banks.

Section 18. Interpretation. As used in this agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this agreement shall not affect the interpretation or the legal efficacy of this agreement.

In witness whereof the parties have caused this agreement to be executed by their respective officers duly authorized and their corporate seals (if applicable) to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this agreement is identical to the wording specified in WAC 173-360-490 as such regulations were constituted on the date written above.

[Signature of grantor]
[Name of the grantor]
[Title]
Attest:
[Signature of trustee]
[Name of the trustee]
[Title]
[Seal]
Attest:
[Signature of witness]
[Name of witness]
[Title]
[Seal]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-490, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-493 Appendix H—Certification of acknowledgment.

State of Washington
County of

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation; and that she/he signed her/his name thereto by like order.

[Signature of notary public]
[Name of notary public]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-493, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-496 Appendix I—Certification of financial responsibility.

CERTIFICATION OF FINANCIAL RESPONSIBILITY

[Owner or operator] hereby certifies that it is in compliance with the requirements of WAC 173-360-400 through 173-360-499.

The financial assurance mechanism[s] used to demonstrate financial responsibility under WAC 173-360-400 through 173-360-499 is [are] as follows:

[For each mechanism, list the type of mechanism, name of issuer, mechanism number (if applicable), amount of coverage, effective period of coverage and whether the mechanism covers "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases."]

[Signature of owner or operator]
[Name of owner or operator]
[Title]
[Date]
[Signature of witness or notary]
[Name of witness or notary]
[Date]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-496, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-499 Appendix J—Certification of valid claim.

CERTIFICATION OF VALID CLAIM

The undersigned, as principals and as legal representatives of [insert owner or operator] and [insert name and address of third-party claimant], hereby certify that the claim of bodily injury [and/or] property damage caused by an accidental release arising from operating [owner's or operator's] underground storage tank should be paid in the amount of $[. . .].

[Signatures]	[Signature(s)]
Owner or Operator	Claimant(s)
Attorney for	Attorney(s) for
Owner or Operator	Claimant(s)
(Notary) Date	(Notary) Date

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-499, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

PART V
LOCAL PROGRAMS

Note: RCW 90.76.110 states that the rules adopted under chapter 90.76 RCW preempt and supersede any state or local underground storage tank law, ordinance, or resolution governing any aspect of regulation covered by these regulations. Exceptions are: (1) Local laws, ordinances, and resolutions pertaining to local authority to take immediate action in response to a release of a regulated substance; (2) local laws, ordinances, and resolutions pertaining to permits and fees for the use of underground storage tanks in street right

of ways that were in existence prior to July 1, 1990; and (3) underground storage tank ordinances that are more stringent than the federal regulations and the uniform codes adopted under chapter 19.27 RCW and that were in effect on November 1, 1988. These cities, towns, and counties were required by the statute to notify the department of the existence of that ordinance by July 1, 1989. The department has received notification from: City of Spokane, Spokane County, Tacoma-Pierce County, city of Redmond, and city of Renton.

WAC 173-360-500 Local delegation of underground storage tank programs. (1) The department encourages the delegation of underground storage tank program responsibilities to a qualified city, town, or county.

(2) A city, town, or county may apply to the department for delegation of authority to enforce, within its jurisdictional boundaries, the state underground storage tank regulations included in part or all of WAC 173-360-100 through 173-360-399.

(3) A fire protection district or political subdivision may enter into an agreement under chapter 39.34 RCW with a city, town, or county to assume all or a portion of delegated program responsibilities. Department approval shall be obtained prior to the effective date of such agreement, and such agreement shall be part of the city, county, or town's agreement or contract with the department.

(4) A city, town, or county seeking delegation of underground storage tank program activities shall submit a written application to the department, describing the portions of the state program for which delegation is sought. The application shall contain the following:

(a) A description of the scope, structure, and procedures of the proposed program; and

(b) A description, including an organization chart, of the local agency which will operate the program, including:

(i) The number of employees, occupation and general duties of each employee who will carry out the activities of the program;

(ii) An estimate of the cost of establishing and administering the program, including the cost of personnel listed in (b)(i) of this subsection, as well as administrative and technical support.

(5) Within thirty days after receiving the application, the department will review the application for completeness and request any additional information needed in order for the application to be complete.

(6) The department will begin negotiating with the applicant within thirty days of receiving a complete application, in order to establish the following:

(a) The source and amount of funding available to meet the costs listed in subsection (4)(b)(ii) of this section, including any restrictions or limitation upon this funding;

(b) The applicable procedures, including any required permit procedures;

(c) Permit forms, application forms, and reporting forms that will be used in the program;

(d) The methods to be used to assure compliance and enforcement of the program; and

(e) The procedures to be used to coordinate information with the department, including the frequency of reporting and report content.

(7) After finalizing the items listed in subsection (6) of this section, the department will prepare and mail a written agreement or contract to the applicant, which outlines the terms and conditions under which the department will delegate the state underground storage tank program, or portions of the state program, to the applicant. The applicant must sign and return the agreement or contract to the department in order for the agreement or contract to become effective.

(8) In developing agreements or contracts with local governments, the department shall, if possible, provide for an appropriate distribution of resources collected under RCW 90.76.090, while still enabling the department to operate a state program.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-500, filed 11/28/90, effective 12/29/90.]

WAC 173-360-510 Environmentally sensitive areas. (1) An environmentally sensitive area is an area, proposed by a city, town or county, and designated by the department, which possesses physical characteristics that make it especially vulnerable to threats from leaking underground storage tanks, and in which local underground storage tank requirements more stringent than statewide requirements are necessary.

(2) Any city, town, or county may apply to the department to have an area within its jurisdictional boundaries designated an environmentally sensitive area. A city, town, or county may submit a joint application with any other city, town, or county for joint administration under chapter 39.34 RCW of a single environmentally sensitive area located in both jurisdictions.

(3) An area that has been designated a sensitive area for the purposes of protecting ground water or surface water from pollution under another statute or regulation will, upon request for designation by the local government, be approved as an environmentally sensitive area for the purposes of WAC 173-360-510. Those areas may include, but are not limited to:

(a) An aquifer identified as the primary source of supply for public water supply systems;

(b) An aquifer 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;

(c) An aquifer designated as a sole source aquifer by the Federal Environmental Protection Agency;

(d) An area designated a certified ground water management area identified under chapter 173-100 WAC; and

(e) An area designated an aquifer protection area, under chapter 36.36 RCW.

(4) The agency requesting designation shall comply with WAC 173-360-530.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-510, filed 11/28/90, effective 12/29/90.]

WAC 173-360-520 Physical criteria for environmentally sensitive areas. Except as provided for in WAC 173-360-510(3), environmentally sensitive areas shall be designated based on the criteria established by the department. One or more of the criteria shall be present and the depart-

ment will evaluate the application for designation based on the overall sensitivity of the environment and consistency with WAC 173-360-510(1). Those criteria include, but are not limited to:

(1) Ground water that is vulnerable to pollution because of specific hydrogeological characteristics, including but not limited to, recharge areas, permeability, precipitation, direction and quantity of ground water flow, and presence of aquitards;

(2) Proximity to wetlands;

(3) Being located within a 100-year flood plain; or

(4) Proximity to other surface waters that can be shown to have a hydrogeologic link to such ground water as is described in subsection (1) of this section, underlying an area where underground storage tank systems are installed or may be installed, if a leak from such a system has a reasonable chance of reaching ground water.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-520, filed 11/28/90, effective 12/29/90.]

WAC 173-360-530 Application for designation of environmentally sensitive area and approval of local regulations. (1) Designation of an environmentally sensitive area under this chapter is solely for the purposes of implementing chapter 90.76 RCW, and such designation under chapter 90.76 RCW does not establish an environmentally sensitive area under any other law.

(2) The application for designation of an environmentally sensitive area shall consist of a concise, factual report and shall consider the guidelines and criteria set forth in WAC 173-360-520. The local government applicant shall provide sufficient information for the department to determine if the area should be so designated. Information provided by the applicant shall include, but need not be limited to, the following:

(a) A rationale for the proposed designation;

(b) A description of any underground water resource included within the proposed environmentally sensitive area;

(c) The geographic limits of the area where more stringent underground storage tank standards would be required;

(d) Any available maps of the aquifer and recharge area, including water table;

(e) A map of the area to be designated;

(f) A description of the more stringent underground storage tank standards proposed to be required in the area, including underground storage tank technical standards, operating standards, and administrative procedures. When proposing more stringent standards, the local jurisdiction should consider:

(i) Actions already undertaken by owners or operators to upgrade existing underground storage tank systems to federal or state standards, and the economic impacts of requiring already upgraded systems to meet more stringent standards; and

(ii) The possible impacts of contaminated ground water on human health and the environment and whether underground storage tank systems which have already been upgraded under the requirements of the state or federal rules will effectively prevent leaks which may contaminate ground water.

(g) A description of any other measures in place or considered to protect ground water and/or surface water from environmental threats;

(h) Any written comments submitted by members of the public to the local government regarding the proposed designation of an environmentally sensitive area; and

(i) Documentation of coordination with affected state and local agencies and water user groups.

(3) Additional information may be required by the department if necessary to adequately evaluate the proposal. This information may include, but is not limited to, the following:

(a) The geographic limits of the ground water recharge zone;

(b) The geographic limits of the underground water resource;

(c) The geology within both the recharge zone and the underground water resource;

(d) Location, yield, well depth and present use of wells within the limits of the threatened underground water resource;

(e) Estimated capacity of the underground water resource;

(f) Location, type and number of underground storage tanks existing in the proposed area;

(g) Such other information the department deems necessary.

(4) Prior to submitting the request for designation and approval of more stringent standards to the department, the local government applicant shall hold at least one public hearing for the purpose of receiving comments from the public, affected local, state, and tribal agencies and ground water user groups, regarding the designation proposal. The local government shall provide adequate notice to affected parties.

The local government applicant shall submit the application for designation and approval of more stringent standards to the department and other affected agencies and ground water user groups for their review and comment. Comments shall be submitted to the department.

(5) Within thirty days after receiving the application, the department will review the application for completeness and request any additional information needed in order for the application to be complete.

(a) Prior to approval of the application, the department may, at its discretion, hold a public hearing in the jurisdiction where the environmentally sensitive area is proposed.

(b) The department shall approve or disapprove the application for designation as an environmentally sensitive area based upon review of the application, comments received, whether the proposed area meets the guidelines and criteria of WAC 173-360-520 and 173-360-530, and whether the proposed local ordinance or resolution is reasonably consistent with previously approved local regulations for similar environmentally sensitive areas.

(6) If application for the designation of an environmentally sensitive area is made later than five years after the date of final adoption of these rules, proposed local ordinances and resolutions shall only apply to new underground storage tank installations.

Ordinances and resolutions described under subsection (1) of this section and disapproved by the department may be modified by the local government and resubmitted to the department for approval.

(7) Proposed local ordinances and resolutions shall become effective when approved by the department.

(8) A local jurisdiction with an approved ordinance or resolution under this chapter may establish local tank fees, in an amount not to exceed fifty percent of the annual state tank fee, if the fee is necessary for enhanced program administration or enforcement. Pursuant to RCW 90.76.090, the fee shall be collected and deposited into the state underground storage tank account.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-530, filed 11/28/90, effective 12/29/90.]

PART VI
REGISTRATION AND LICENSING REQUIREMENTS FOR UNDERGROUND STORAGE TANK SERVICE PROVIDERS AND SERVICE SUPERVISORS

Note: Individuals who perform underground tank services may be subject to additional state laws and regulations. These include, but may not be limited to:
(1) Chapter 18.27 RCW and chapter 296-200 WAC, which apply to individuals who are general and specialty contractors;
(2) Chapter 18.104 RCW and chapter 173-162 WAC, which apply to individuals who install ground water monitoring wells;
(3) Chapter 19.28 RCW, chapters 296-46 and 296-40 WAC, which apply to individuals who install and repair impressed current cathodic protection systems; and
(4) Chapter 49.17 RCW and chapter 296-62 WAC, which apply to individuals engaged in activities involving hazardous chemicals and substances and who perform confined space entry during field activities, and chapter 296-155 WAC, which sets forth safety standards for construction work.

WAC 173-360-600 Purpose of Part VI. After the effective date of these regulations, individuals who perform tank services must be certified by the International Fire Code Institute, or other nationally recognized association that the department has determined provides an examination and credentials whereby individuals can demonstrate their knowledge of various regulatory codes, standards and practices pertaining to underground storage tanks, or have passed another qualifying exam approved by the department. Washington registered professional engineers who are competent, by means of examination, experience, or education, to perform site assessments, are not required to be certified for site assessment work.

The purpose of WAC 173-360-600 through 173-360-630 is to set forth standards for certification and responsibilities for certified UST supervisors.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-600, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-600, filed 11/28/90, effective 12/29/90.]

WAC 173-360-610 Scope. WAC 173-360-610 through 173-360-630 establishes requirements for:

Certification of UST supervisors who perform services on underground storage tank systems;

These rules apply to any person who performs the installation, retrofitting, decommissioning, testing, site check, site assessment, of underground storage tanks regulated by chapter 90.76 RCW.

These requirements do not apply to persons performing the activities specified in subsection (2) of this section for tanks which are exempt from the UST rule, as provided in WAC 173-360-110 (1) and (2).

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-610, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-610, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-610, filed 11/28/90, effective 12/29/90.]

WAC 173-360-620 Types of certifications. The department requires certifications in the following areas:

(1) Tank installation and retrofitting;

(2) Tank decommissioning;

(3) Tightness testing;

(4) Cathodic protection installation and testing; and

(5) Site assessment associated with tank closure.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-620, filed 2/1/95, effective 3/4/95.]

WAC 173-360-630 Responsibilities of certified UST supervisors. (1) Any certified UST supervisor shall comply with WAC 173-360-600 through 173-360-630, and comply with all federal and state regulations and procedures when performing tank services.

(2)(a) A checklist must be completed for each regulated activity performed. The certified UST supervisor shall sign the checklist provided by the department within thirty days following the completion of an underground storage tank installation, retrofit, decommissioning, or test.

(b) An as-built site plan, showing the location of completed tank system installations or retrofitted tank system, including adjacent structures, if present shall be submitted for installations and retrofits. The as-built site plan shall be submitted on the appropriate form provided by the department, or shall be an 8 1/2 inch by 11 inch single page drawing.

(3) A certified UST supervisor shall report to the department and the tank owner or operator the existence of any confirmed release from an underground tank system that poses a threat to human health and the environment. This report shall be provided to the tank owner or operator immediately, and to the department within seventy-two hours of the discovery of the condition. If the owner or operator are not immediately available, the report should be made immediately to the department.

(4) A certified UST supervisor shall be present on site at all times tank service activities are being carried out at a tank installation, retrofit, testing, decommissioning project unless otherwise determined by the department. These tasks may include but may not be limited to:

(a) Preparing the excavation immediately prior to receiving backfill and placement of the tank into the excavation;

(b) Any movement of the tank vessel, including but not limited to transferring the vessel from the vehicle used to transport it to the project site;

(c) Setting the tank and its associated piping into the excavation, including placing any anchoring devices and strapping, if any, and backfilling to the level of the tank;

(d) Placing and connecting the piping system to the tank vessel;

(e) Installing cathodic protection systems;

(f) All pressure testing of the underground storage tank system, including associated piping, performed during the installation or retrofitting;

(g) Completing the backfill and filling of the installation;

(h) Evaluating preparation for and installing any tank lining system;

(i) Tank purging or inerting;

(j) Removal of the tank, removal of sludge from the tank, and cleaning of the tank;

(k) Removing flammable vapors from tanks;

(l) Excavating around tanks for removal;

(m) Field installation and operational testing of cathodic protection systems;

(n) Inspecting of existing tank and piping systems for corrosion;

(o) Tank or line tightness testing;

(p) Inspection of existing tanks for structural integrity;

(q) Installation of release detection equipment; and

(r) Conducting a site assessment at tank closure.

(5) If a certified UST supervisor obtains knowledge, in the course of performing regulated activities, that a regulated underground storage tank has not been registered with the department, or is otherwise out of compliance with the requirements of this chapter, the individual shall inform the tank owner or operator of the notification requirement and any other applicable requirements.

(6) Proof of supervisor certification shall be available for inspection at any project site.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-630, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-630, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-630, filed 11/28/90, effective 12/29/90.]

WAC 173-360-670 Penalties. Any person or firm who violates this chapter is subject to a civil penalty not to exceed five thousand dollars for each tank per day of violation, pursuant to RCW 90.76.080(2).

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-670, filed 11/28/90, effective 12/29/90.]

Chapter 173-400 WAC

GENERAL REGULATIONS FOR AIR POLLUTION SOURCES

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-400-080 Compliance schedules. [Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-080, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-080, filed 5/8/79; Order DE 76-38, § 173-400-080, filed 12/21/76. Formerly WAC 18-04-080.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-090 Sensitive area designation. [Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-090, filed 8/20/80; Order DE 76-38, § 173-400-090, filed 12/21/76. Formerly WAC 18-04-090.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-130 Regulatory actions. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-130, filed 5/8/79; Order DE 76-38, § 173-400-130, filed 12/21/76. Formerly WAC 18-04-130.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-135 Criminal penalties. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-135, filed 5/8/79.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-140 Appeals. [Order DE 76-38, § 173-400-140, filed 12/21/76. Formerly WAC 18-04-140.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-150 Variance. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-150, filed 5/8/79; Order DE 76-38, § 173-400-150, filed 12/21/76. Formerly WAC 18-04-150.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-160 Maintenance of pay. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-160, filed 5/8/79.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-170 Requirements for boards and director. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-170, filed 5/8/79.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

WAC 173-400-010 Policy and purpose. (1) It is the policy of the department of ecology (ecology) under the authority vested in it by chapter 43.21A RCW to provide for the systematic control of air pollution from air contaminant sources and for the proper development of the state's natural resources.

(2) It is the purpose of this chapter to establish technically feasible and reasonably attainable standards and to establish rules generally applicable to the control and/or prevention of the emission of air contaminants.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-010, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-010, filed 4/15/83; Order DE 76-38, § 173-400-010, filed 12/21/76. Formerly WAC 18-04-010.]

WAC 173-400-020 Applicability. (1) The provisions of this chapter shall apply statewide.

(2) An authority may enforce this chapter and may also adopt standards or requirements. These standards or requirements may not be less stringent than the current state air quality rules and may be more stringent than the current regulations. Unless properly delegated by ecology, authorities do not have jurisdiction over the following sources:

(a) Specific source categories over which the state, by separate regulation, has assumed or hereafter does assume jurisdiction.

(b) Automobiles, trucks, aircraft.

(c) Those sources under the jurisdiction of the energy facility site evaluation council.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-020, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-020, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-020, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-020, filed 5/8/79; Order DE 76-38, § 173-400-020, filed 12/21/76. Formerly WAC 18-04-020.]

WAC 173-400-030 Definitions. Except as provided elsewhere in this chapter, the following definitions apply throughout the chapter:

(1) **"Actual emissions"** means the actual rate of **emissions** of a pollutant from an **emission unit**, as determined in accordance with (a) through (c) of this subsection.

(a) In general, **actual emissions** as of a particular date shall equal the average rate, in tons per year, at which the **emissions unit** actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal **source** operation. **Ecology** or an **authority** shall allow the use of a different time period upon a determination that it is more representative of normal **source** operation. **Actual emissions** shall be calculated using the **emissions unit's** actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) **Ecology** or an **authority** may presume that **source**-specific **allowable emissions** for the unit are equivalent to the **actual emissions** of the **emissions unit**.

(c) For any **emissions unit** which has not begun normal operations on the particular date, **actual emissions** shall equal the **potential to emit** of the **emissions unit** on that date.

(2) **"Adverse impact on visibility"** is defined in WAC 173-400-117.

(3) **"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."**

(4) **"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. For the purposes of this chapter, air pollution shall not include **air contaminants** emitted in compliance with chapter 17.21 RCW, the Washington Pesticide Application Act, which regulates the application and control of the use of various pesticides.

(5) **"Allowable emissions"** means the **emission** rate of a **source** calculated using the maximum rated capacity of the **source** (unless the **source** is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(a) The applicable standards as in 40 CFR Part 60 or 61;

(b) Any applicable **SIP emissions limitation** including those with a future compliance date; or

(c) The **emissions** rate specified as a federally enforceable permit condition, including those with a future compliance date.

(6) **"Ambient air"** means the surrounding outside air.

(7) **"Ambient air quality standard"** means an established concentration, exposure time, and frequency of occurrence of air **contaminant(s)** in the ambient air which shall not be exceeded.

(8) **"Approval order"** is defined in **"order of approval."**

(9) **"Attainment area"** means a geographic area designated by EPA at 40 CFR Part 81 as having attained the **National Ambient Air Quality Standard** for a given **criteria pollutant**.

(10) **"Authority"** means any air pollution control agency whose jurisdictional boundaries are coextensive with the boundaries of one or more counties.

(11) **"Begin actual construction"** means, in general, initiation of physical on-site construction activities on an **emission unit** which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipe work and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(12) **"Best available control technology (BACT)"** means an **emission limitation** based on the maximum degree of reduction for each air pollutant subject to regulation under chapter 70.94 RCW emitted from or which results from any new or modified **stationary 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 **source** or **modification** through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of the "best available control technology" result in **emissions** of any pollutants which will exceed the **emissions** allowed by any applicable standard under 40 CFR Part 60 and Part 61. **Emissions** from any **source** utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under the definition of **BACT** in the **Federal Clean Air Act** as it existed prior to enactment of the Clean Air Act Amendments of 1990.

(13) **"Best available retrofit technology (BART)"** means an **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 an **existing stationary facility**. 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.

(14) **"Bubble"** means a set of **emission** limits which allows an increase in **emissions** from a given **emissions unit** in exchange for a decrease in **emissions** from another **emissions unit**, pursuant to RCW 70.94.155 and WAC 173-400-120.

(15) **"Capacity factor"** means the ratio of the average load on equipment or a machine for the period of time considered, to the manufacturer's capacity rating of the machine or equipment.

(16) **"Class I area"** means any area designated under section 162 or 164 of the **Federal Clean Air Act** as a Class I area. The following areas are the Class I areas in Washington state:

(a) Alpine Lakes Wilderness;
(b) Glacier Peak Wilderness;
(c) Goat Rocks Wilderness;
(d) Mount Adams Wilderness;
(e) Mount Rainier National Park;
(f) North Cascades National Park;
(g) Olympic National Park;
(h) Pasayten Wilderness; and
(i) Spokane Indian Reservation.

(17) **"Combustion and incineration units"** means units using combustion for waste disposal, steam production, chemical recovery or other process requirements; but excludes **open burning**.

(18)(a) **"Commenced"** as applied to construction, means that the owner or operator has all the necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) 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.

(b) For the purposes of this definition, **"necessary preconstruction approvals"** means those permits or **orders of approval** required under federal air quality control laws and regulations, including state, local and federal regulations and orders contained in the **SIP**.

(19) **"Concealment"** means any action taken to reduce the observed or measured concentrations of a pollutant in a gaseous effluent while, in fact, not reducing the total amount of pollutant discharged.

(20) **"Criteria pollutant"** means a pollutant for which there is established a **National Ambient Air Quality Standard** at 40 CFR Part 50. The criteria pollutants are carbon monoxide (CO), particulate matter, ozone (O_3) sulfur dioxide (SO_2), lead (Pb), and nitrogen dioxide (NO_2).

(21) **"Director"** means director of the Washington state department of **ecology** or duly authorized representative.

(22) **"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.

(23) **"Ecology"** means the Washington state department of ecology.

(24) **"Emission"** means a release of **air contaminants** into the **ambient air**.

(25) **"Emission reduction credit (ERC)"** means a credit granted pursuant to WAC 173-400-131. This is a voluntary reduction in **emissions**.

(26) **"Emission standard"** and **"emission limitation"** means a requirement established under the **Federal Clean Air Act** or chapter 70.94 RCW which limits the quantity, rate, or concentration of **emissions** of **air contaminants** on a continuous basis, including any requirement relating to the operation or maintenance of a **source** to assure continuous **emission** reduction and any design, equipment work practice, or operational standard adopted under the **Federal Clean Air Act** or chapter 70.94 RCW.

(27) **"Emissions unit"** means any part of a **stationary source** or **source** which emits or would have the **potential to emit** any pollutant subject to regulation under the **Federal Clean Air Act**, chapter 70.94 or 70.98 RCW.

(28) **"Excess emissions"** means **emissions** of an **air pollutant** in excess of any applicable **emission standard**.

(29) **"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 173-400-200(2).

(30) **"Existing stationary facility (FACILITY)"** is defined in WAC 173-400-151.

(31) **"Federal Clean Air Act (FCAA)"** means the Federal Clean Air Act, also known as Public Law 88-206, 77 Stat. 392, December 17, 1963, 42 U.S.C. 7401 et seq., as last amended by the Clean Air Act Amendments of 1990, P.L. 101-549, November 15, 1990.

(32) **"Federal Class I area"** means any federal land that is classified or reclassified **Class I**. The following areas are federal Class I areas in Washington state:

(a) Alpine Lakes Wilderness;
(b) Glacier Peak Wilderness;
(c) Goat Rocks Wilderness;
(d) Mount Adams Wilderness;
(e) Mount Rainier National Park;
(f) North Cascades National Park;
(g) Olympic National Park; and
(h) Pasayten Wilderness.

(33) **"Federal land manager"** means the secretary of the department with authority over federal lands in the United States. This includes, but is not limited to, the U.S. Department of the Interior - National Park Service, the U.S. Department of Agriculture - Forest Service, and/or the U.S. Department of the Interior - Bureau of Land Management.

(34) **"Federally enforceable"** means all limitations and conditions which are enforceable by **EPA**, including those requirements developed under 40 CFR Parts 60 and 61, requirements within any established under 40 CFR 52.21 or under a **SIP** approved **new source** review regulation, including operating permits issued under chapter 173-401 WAC and expressly requires adherence to any permit issued under these programs.

(35) **"Fossil fuel-fired steam generator"** means a device, furnace, or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

(36) **"Fugitive dust"** means a particulate **emission** made airborne by forces of wind, man's activity, or both. Unpaved roads, construction sites, and tilled land are examples of areas that originate fugitive dust. Fugitive dust is a type of **fugitive emission**.

(37) **"Fugitive emissions"** means **emissions** which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(38) **"General process unit"** means an **emissions unit** using a procedure or a combination of procedures for the purpose of causing a change in material by either chemical or physical means, excluding combustion.

(39) **"Good engineering practice (GEP)"** refers to a calculated **stack height** based on the equation specified in WAC 173-400-200 (2)(a)(ii).

(40) **"Incinerator"** means a furnace used primarily for the thermal destruction of waste.

(41) **"In operation"** means engaged in activity related to the primary design function of the **source**.

(42) **"Lowest achievable emission rate (LAER)"** means for any **source** that rate of **emissions** which reflects the more stringent of:

(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**.

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**.

(43) **"Mandatory Class I federal area"** means any area defined in Section 162(a) of the **Federal Clean Air Act**. The following areas are the mandatory Class I federal areas in Washington state:

(a) Alpine Lakes Wilderness;
(b) Glacier Peak Wilderness;
(c) Goat Rocks Wilderness;
(d) Mount Adams Wilderness;
(e) Mount Rainier National Park;
(f) North Cascades National Park;
(g) Olympic National Park; and
(h) Pasayten Wilderness;

(44)(a) **"Major modification,"** as it applies to **sources** subject to requirements for **new sources** in **nonattainment areas**, is defined in WAC 173-400-112.

(b) **"Major modification,"** as it applies to **sources** subject to requirements for **new sources** in **attainment** or **unclassified areas**, is defined in WAC 173-400-113.

(45)(a) **"Major stationary source,"** as it applies to **sources** subject to requirements for **new sources** in **nonattainment areas**, is defined in WAC 173-400-112.

(b) **"Major stationary source,"** as it applies to **sources** subject to requirements for **new sources** in **attainment** or **unclassified areas**, is defined in WAC 173-400-113.

(46) **"Masking"** means the mixing of a chemically nonreactive control agent with a malodorous gaseous effluent to change the perceived odor.

(47) **"Materials handling"** means the handling, transporting, loading, unloading, storage, and transfer of materials with no significant chemical or physical alteration.

(48) **"Modification"** means any physical change in, or change in the method of operation of, a **stationary source** that increases the amount of any **air contaminant** emitted by such **source** or that results in the **emissions** of any **air contaminant** not previously emitted. The term modification shall be construed consistent with the definitions of modification in Section 7411, Title 42, United States Code, and with rules implementing that section.

(49) **"National Ambient Air Quality Standard (NAAQS)"** means an **ambient air quality standard** set by EPA at 40 CFR Part 50 and includes standards for carbon monoxide (CO), particulate matter, ozone (O_3), sulfur dioxide (SO_2), lead (Pb), and nitrogen dioxide (NO_2).

(50) **"National Emission Standards for Hazardous Air Pollutants (NESHAPS)"** means the federal rules in 40 CFR Part 61.

(51) **"National Emission Standards for Hazardous Air Pollutants for Source Categories"** means the federal rules in 40 CFR Part 63.

(52) **"Natural conditions"** means naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.

(53)(a) **"Net emissions increase,"** as it applies to **sources** subject to requirements for **new sources** in **nonattainment areas**, is defined in WAC 173-400-112.

(b) **"Net emissions increase,"** as it applies to **sources** subject to requirements for **new sources** in **attainment** or **unclassified areas**, is defined in WAC 173-400-113.

(54) **"New source"** means:

(a) The construction or **modification** of a **stationary source** that increases the amount of any **air contaminant** emitted by such **source** or that results in the **emission** of any **air contaminant** not previously emitted; and

(b) Any other project that constitutes a new source under the **Federal Clean Air Act**.

(55) **"New Source Performance Standards (NSPS)"** means the federal rules in 40 CFR Part 60.

(56) **"Nonattainment area"** means a geographic area designated by EPA at 40 CFR Part 81 as exceeding a **National Ambient Air Quality Standard (NAAQS)** for a given **criteria pollutant**. An area is nonattainment only for the pollutants for which the area has been designated nonattainment.

(57) **"Nonroad engine"** means:

(a) Except as discussed in (b) of this subsection, a nonroad engine is any internal combustion engine:

(i) In or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or

(ii) In or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or

(iii) That, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(b) An internal combustion engine is not a nonroad engine if:

(i) The engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Federal Clean Air Act; or

(ii) The engine is regulated by a **New Source Performance Standard** promulgated under section 111 of the Federal Clean Air Act; or

(iii) The engine otherwise included in (a)(iii) of this subsection remains or will remain at a location for more than twelve consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

(58) **"Notice of construction application"** means a written application to permit construction of a **new source, modification** of an existing **stationary source** or replacement or substantial alteration of control technology at an existing **stationary source**.

(59) **"Opacity"** means the degree to which an object seen through a plume is obscured, stated as a percentage.

(60) **"Open burning"** means the combustion of material in an open fire or in an outdoor container, without providing for the control of combustion or the control of the **emissions** from the combustion. Wood waste disposal in wigwam burners is not considered **open** burning.

(61) **"Order"** means any order issued by **ecology** or a local air **authority** pursuant to chapter 70.94 RCW, including, but not limited to RCW 70.94.332, 70.94.152, 70.94.153, and 70.94.141(3), and includes, where used in the generic sense, the terms **order**, corrective action order, **order of approval**, and **regulatory order**.

(62) **"Order of approval"** or **"approval order"** means a **regulatory order** issued by **ecology** or the **authority** to approve the **notice of construction application** for a proposed **new source** or **modification**, or the replacement or substantial alteration of control technology at an existing **stationary source**.

(63) **"Ozone depleting substance"** means any substance listed in Appendices A and B to Subpart A of 40 CFR Part 82.

(64) **"Particulate matter"** or **"particulates"** means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

(65) **"Particulate matter emissions"** means all finely divided solid or liquid material, other than uncombined water, emitted to the **ambient air** as measured by applicable reference methods, or an equivalent or alternative method specified in Title 40, chapter I of the Code of Federal Regulations or by a test method specified in the **SIP**.

(66) **"Parts per million (ppm)"** means parts of a contaminant per million parts of gas, by volume, exclusive of water or **particulates**.

(67) **"Permitting agency"** means **ecology** or the local air pollution control **authority** with jurisdiction over the **source**.

(68) **"Person"** means an individual, firm, public or private corporation, association, partnership, political subdivision, municipality, or government agency.

(69) **"PM-10"** means **particulate matter** with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 CFR Part 50 Appendix J and designated in accordance with 40 CFR Part 53 or by an equivalent method designated in accordance with 40 CFR Part 53.

(70) **"PM-10 emissions"** means finely divided solid or liquid material, including condensible **particulate matter**, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the **ambient air** as measured by an applicable reference method, or an equivalent or alternate method, specified in Appendix M of 40 CFR Part 51 or by a test method specified in the **SIP**.

(71) **"Potential to emit"** means the maximum capacity of a **source** to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including **air pollution** control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on **emissions** is federally enforceable. Secondary emissions do not count in determining the **potential to emit** of a **source**.

(72) **"Prevention of significant deterioration (PSD)"** means the program in WAC 173-400-141.

(73) **"Projected width"** means that dimension of a structure determined from the frontal area of the structure, projected onto a plane perpendicular to a line between the center of the **stack** and the center of the building.

(74) **"Reasonably attributable"** means attributable by visual observation or any other technique the state deems appropriate.

(75) **"Reasonably available control technology (RACT)"** means the lowest **emission** limit that a particular **source** or **source** category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. RACT is determined on a case-by-case basis for an individual **source** or **source** category taking into account the impact of the **source** upon air quality, the availability of additional controls, the **emission** reduction to be achieved by additional controls, the impact of additional controls on air quality, and the capital and operating costs of the additional controls. RACT requirements for any **source** or **source** category shall be adopted only after notice and opportunity for comment are afforded.

(76) **"Regulatory order"** means an **order** issued by **ecology** or an **authority** to an **air contaminant source** which applies to that **source**, any applicable provision of chapter 70.94 RCW, or the rules adopted thereunder, or, for **sources** regulated by a local air **authority**, the regulations of that **authority**.

(77)(a) **"Significant,"** as it applies to **sources** subject to requirements for **new sources** in **nonattainment areas**, is defined in WAC 173-400-112.

(b) **"Significant,"** as it applies to **sources** subject to requirements for **new sources** in **attainment** or **unclassified areas**, is defined in WAC 173-400-113.

(78) **"Source"** means all of the **emissions unit(s)** including quantifiable **fugitive emissions**, that 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 groups of products. Activities shall be considered ancillary to the production of a single product or functionally related group of products if they belong to the same major group (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual, 1972,* as amended.

(79) **"Source category"** means all **sources** of the same type or classification.

(80) **"Stack"** means any point in a **source** designed to emit solids, liquids, or gases into the air, including a pipe or duct.

(81) **"Stack height"** means the height of an **emission** point measured from the ground-level elevation at the base of the **stack**.

(82) **"Standard conditions"** means a temperature of 20° (68° F) and a pressure of 760 mm (29.92 inches) of mercury.

(83) **"State implementation plan (SIP)"** or **"Washington SIP"** means the Washington SIP in 40 CFR Part 52, subpart WW. The SIP contains state, local and federal regulations and orders, the state plan and compliance schedules approved and promulgated by EPA, for the purpose of implementing, maintaining, and enforcing the **National Ambient Air Quality Standards**.

(84) **"Stationary source"** means any building, structure, facility, or installation which emits or may emit any air contaminant. This term does not include emissions resulting directly from an internal combustion engine for transportation purposes or from a **nonroad engine** or nonroad vehicle as defined in Section 216(11) of the **Federal Clean Air Act**.

(85) **"Sulfuric acid plant"** means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge.

(86) **"Synthetic minor"** means any **source** whose **potential to emit** has been limited below applicable thresholds by means of a federally enforceable **order**, rule, or permit condition.

(87) **"Total reduced sulfur (TRS)"** means the sum of the sulfur compounds hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide, and any other organic sulfides emitted and measured by **EPA** method 16 in Appendix A to 40 CFR Part 60 or an approved equivalent method and expressed as hydrogen sulfide.

(88) **"Total suspended particulate"** means **particulate matter** as measured by the method described in 40 CFR Part 50 Appendix B.

(89) **"Toxic air pollutant (TAP)"** or **"toxic air contaminant"** means any Class A or B toxic air pollutant listed in WAC 173-460-150 and 173-460-160. The term toxic air

pollutant may include **particulate matter** and **volatile organic compounds** if an individual substance or a group of substances within either of these classes is listed in WAC 173-460-150 and/or 173-460-160. The term toxic air pollutant does not include **particulate matter** and **volatile organic compounds** as generic classes of compounds.

(90) **"Unclassifiable area"** means an area that cannot be designated **attainment** or **nonattainment** on the basis of available information as meeting or not meeting the **National Ambient Air Quality Standard** for the **criteria pollutant** and that is listed by **EPA** at 40 CFR Part 81.

(91) **"United States Environmental Protection Agency (USEPA)"** shall be referred to as **EPA**.

(92) **"Visibility impairment"** means any humanly perceptible change in visibility (light extinction, visual range, contrast, or coloration) from that which would have existed under natural conditions.

(93) **"Volatile organic compound (VOC)"** means any carbon compound that participates in atmospheric photochemical reactions.

(a) Exceptions. The following compounds are not a VOC: Acetone; carbon monoxide; carbon dioxide; carbonic acid; metallic carbides or carbonates; ammonium carbonate, methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro 1,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro 1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1 chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane($(CF_3)_2CFCF_2OC_2H_5$); methyl acetate and perfluorocarbon compounds that fall into these classes:

(i) Cyclic, branched, or linear completely fluorinated alkanes;

(ii) Cyclic, branched, or linear completely fluorinated ethers with no unsaturations;

(iii) Cyclic, branched, or linear completely fluorinated tertiary amines with no unsaturations; and

(iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(b) For the purpose of determining compliance with emission limits, VOC will be measured by the appropriate methods in 40 CFR Part 60 Appendix A. Where the method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOC if the amount of the compounds is accurately quantified, and the exclusion is approved by **ecology**, the **authority**, or EPA.

(c) As a precondition to excluding these negligibly-reactive compounds as VOC or at any time thereafter, **ecology** or the **authority** may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of **ecology** or the **authority**, the amount of negligibly-reactive compounds in the **source's emissions**.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-030, filed 8/15/01, effective 9/15/01. Statutory Authority: RCW 70.94.152. 98-01-183 (Order 96-01), § 173-400-030, filed 12/23/97, effective 1/23/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-030, filed 9/13/96, effective 10/14/96; 95-07-126 (Order 93-40), § 173-400-030, filed 3/22/95, effective 4/22/95; 93-18-007 (Order 93-03), § 173-400-030, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-030, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-030, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-030, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-030, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-030, filed 5/8/79; Order DE 76-38, § 173-400-030, filed 12/21/76. Formerly WAC 18-04-030.]

WAC 173-400-035 Portable and temporary sources. (1) For portable sources which locate temporarily at particular sites, the owner(s) or operator(s) shall be allowed to operate at the temporary location providing that the owner(s) or operator(s) notifies **ecology** or the **authority** of intent to operate at the new location at least thirty days prior to starting the operation, and supplies sufficient information to enable **ecology** or the **authority** to determine that the operation will comply with the **emission standards** for a **new source**, and will not cause a violation of applicable **ambient air quality standards** and, if in a **nonattainment area**, will not interfere with scheduled attainment of **ambient standards**. The permission to operate shall be for a limited period of time (one year or less) and **ecology** or the **authority** may set specific conditions for operation during that period. A temporary source shall be required to comply with all applicable **emission standards**. A temporary or portable source that is considered a **major stationary source** within the meaning of WAC 173-400-113 must also comply with the requirements in WAC 173-400-141.

(2) This section applies statewide except where an authority has its own rule regulating such sources.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-035, filed 8/15/01, effective 9/15/01.]

WAC 173-400-040 General standards for maximum emissions. All **sources** and **emissions units** are required to meet the **emission standards** of this chapter. Where an **emission standard** listed in another chapter is applicable to a specific **emissions unit**, such standard will take precedent over a general **emission standard** listed in this chapter. When two or more **emissions units** are connected to a common **stack** and the operator elects not to provide the means or facilities to sample **emissions** from the individual **emissions units**, and the relative contributions of the individual **emissions units** to the common discharge are not readily distinguishable, then the **emissions** of the common **stack** must meet the most restrictive standard of any of the connected **emissions units**. Further, all **emissions units** are required to use **reasonably available control technology (RACT)** which may be determined for some **sources** or **source categories** to be more stringent than the applicable **emission limitations** of any chapter of Title 173 WAC. Where current controls are determined to be less than **RACT**, **ecology** or the **authority** shall, as provided in RCW 70.194.154, define **RACT** for each **source** or **source category** and issue a rule or **regulatory order** requiring the installation of **RACT**.

(1) **Visible emissions.** No **person** shall cause or permit the **emission** for more than three minutes, in any one hour, of an **air contaminant** from any **emissions unit** which at the **emission** point, or within a reasonable distance of the **emission** point, exceeds twenty percent **opacity** except:

(a) When the **emissions** occur due to soot blowing/grate cleaning and the operator can demonstrate that the **emissions** will not exceed twenty percent **opacity** for more than fifteen minutes in any eight consecutive hours. The intent of this provision is to permit the soot blowing and grate cleaning necessary to the operation of boiler facilities. This practice, except for testing and trouble shooting, is to be scheduled for the same approximate times each day and **ecology** or the **authority** be advised of the schedule.

(b) When the owner or operator of a **source** supplies valid data to show that the presence of uncombined water is the only reason for the **opacity** to exceed twenty percent.

(c) When two or more **emission units** are connected to a common **stack**, **ecology** or the **authority** may allow or require the use of an alternate time period if it is more representative of normal operations.

(d) When an alternate **opacity** limit has been established per RCW 70.94.331 (2)(c).

(2) **Fallout.** No **person** shall cause or permit the **emission** of **particulate matter** from any **source** to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

(3) **Fugitive emissions.** The owner or operator of any **emissions unit** engaging in materials handling, construction, demolition or any other operation which is a **source** of fugitive emission:

(a) If located in an **attainment area** and not impacting any **nonattainment area**, shall take reasonable precautions to prevent the release of **air contaminants** from the operation.

(b) If the **emissions unit** has been identified as a **significant** contributor to the **nonattainment status** of a designated **nonattainment area**, shall be required to use reasonable and available control methods, which shall include any necessary changes in technology, process, or other control strategies to control **emissions** of the **air contaminants** for which **nonattainment** has been designated.

(4) **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 must use recognized good practice and procedures to reduce these odors to a reasonable minimum.

(5) **Emissions detrimental to persons or property.** No person shall cause or permit the **emission** of any **air contaminant** from any **source** if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.

(6) **Sulfur dioxide.**

No **person** shall cause or permit the **emission** of a gas containing sulfur dioxide from any **emissions unit** in excess of one thousand **ppm** of sulfur dioxide on a dry basis, corrected to seven percent oxygen for combustion **sources**, and based on the average of any period of sixty consecutive minutes, except:

When the owner or operator of an **emissions unit** supplies **emission** data and can demonstrate to **ecology** or the **authority** that there is no feasible method of reducing the concentration to less than one thousand **ppm** (on a dry basis, corrected to seven percent oxygen for **combustion sources**) and that the state and federal **ambient air quality standards** for sulfur dioxide will not be exceeded. In such cases, **ecology** or the **authority** may require specific **ambient air** monitoring stations be established, operated, and maintained by the owner or operator at mutually approved locations. All sampling results will be made available upon request and a monthly summary will be submitted to **ecology** or the **authority**.

(7) **Concealment and masking.** No **person** shall cause or permit the installation or use of any means which conceals or masks an **emission** of an **air contaminant** which would otherwise violate any provisions of this chapter.

(8) **Fugitive dust sources.**

(a) The owner or operator of a **source** of **fugitive dust** shall take reasonable precautions to prevent **fugitive dust** from becoming airborne and shall maintain and operate the **source** to minimize **emissions**.

(b) The owner or operator of any existing source of **fugitive dust** that has been identified as a **significant** contributor to a **PM-10 nonattainment area** shall be required to use **rea-**

sonably available control technology to control **emissions**. Significance will be determined by the criteria found in WAC 173-400-113 (2)(c).

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-040, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-040, filed 11/22/00, effective 12/23/00. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-040, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-040, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-040, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-040, filed 5/8/79; Order DE 76-38, § 173-400-040, filed 12/21/76. Formerly WAC 18-04-040.]

WAC 173-400-045 Control technology fees. (1) General. Ecology may assess and collect a fee as authorized in RCW 70.94.154 and described in subsections (2) through (5) of this section.

(2) Fee schedule for source-specific determinations where RACT analysis and determination are performed by ecology.

(a) Basic RACT analysis and determination fee:

(i) Low complexity (the analysis addresses one type of emission unit) - one thousand five hundred dollars;

(ii) Moderate complexity (the analysis addresses two to five types of emissions units) - seven thousand five hundred dollars;

(iii) High complexity (the analysis addresses more than five types of emission units) - fifteen thousand dollars.

(b) Additional charges based on criteria pollutant emissions: In addition to those fees required under (a) of this subsection, a fee will be required for a RACT analysis and determination for an emission unit or multiple emission units of uniform design that, individually or in the aggregate, emit one hundred tons per year or more of any criteria pollutant - two thousand dollars.

(c) Additional charges based on toxic air pollutant emissions: In addition to those fees required under (a) and (b) of this subsection, the following fees will be required as applicable:

(i) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than two tons per year but not more than ten tons per year of any toxic air pollutant - one thousand dollars; or

(ii) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than ten tons per year of any toxic air pollutant - two thousand dollars.

(3) Fee schedule for source-specific determinations where RACT analysis is performed by the source and review and determination conducted by ecology.

(a) Basic RACT review and determination fees:

(i) Low complexity (the analysis addresses one type of emission unit) - one thousand dollars;

(ii) Moderate complexity (the analysis addresses two to five types of emissions units) - five thousand dollars;

(iii) High complexity (the analysis addresses more than five types of emission units) - ten thousand dollars.

(b) Additional charges based on criteria pollutant emissions: In addition to those fees required under (a) of this subsection, a fee will be required for a RACT analysis and determination for an emission unit or multiple emissions units of uniform design that, individually or in the aggregate, emit one hundred tons per year or more of any criteria pollutant - one thousand dollars.

(c) Additional charges based on toxic air pollutant emissions: In addition to those fees required under (a) and (b) of this subsection, the following fees will be required as applicable:

(i) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than two tons per year but not more than ten tons per year of any toxic air pollutant - five hundred dollars; or

(ii) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than ten tons per year of any toxic air pollutant - one thousand dollars.

(4) Fee schedule for reviews authorized under RCW 70.94.153 for the replacement or substantial alteration of control technology.

(a) Notice of construction application. Review and approval of notice of construction application (NOCA) for replacement or substantial alteration of control technology - three hundred fifty dollars.

(b) RACT analysis and determination. Review and approval of a RACT analysis and determination for affected emission unit - five hundred dollars.

(5) Fee schedule for categorical RACT determinations. Fees for categorical RACT determinations (for categories with more than three sources) shall be assessed as shown below. The fees described in (a) of this subsection shall be based on the most complex source within a category. Except as provided in (b) and (d) of this subsection, fees for individual sources in the category will be determined by dividing the total source category fee by the number of sources within the category.

(a) RACT analysis and determination (RACT analysis performed by ecology with assistance from sources):

(i) Low complexity source category (average source emissions of individual criteria pollutants are all less than twenty tons per year, average source emissions of individual toxic air pollutants are all less than two tons per year, or the analysis addresses one type of emission unit) - twenty-five thousand dollars;

(ii) Moderate complexity source category (average source emissions of one or more individual criteria pollutants are greater than twenty tons/year and less than one hundred tons per year, average source emissions of one or more individual toxic air pollutants are greater than two tons per year and less than ten tons per year, or the analysis addresses two to five types of emissions units) - fifty thousand dollars; or

(iii) High complexity source category (average source emissions of one or more individual criteria pollutants exceed one hundred tons per year, average source emissions of one or more individual toxic air pollutants exceed ten tons per year, or the analysis addresses more than five types of emission units) - one hundred thousand dollars.

(b) If an emission unit is being evaluated for more than one categorical RACT determination within a five-year period, ecology will charge the owner or operator of that emission unit one fee and the fee will reflect the higher complexity categorical RACT determination.

(c) Ecology may adjust the fee to reflect workload savings from source involvement in source category RACT determination.

(d) Ecology may approve alternate methods for allocating the fee among sources within the source category.

(6) Small business fee reduction. The RACT analysis and determination fee identified in subsections (2) through (5) of this section may be reduced for a small business.

(a) To qualify for the small business RACT fee reduction, a business must meet the requirements of "small business" as defined in RCW 43.31.025.

(b) To receive a fee reduction, the owner or operator of a small business must include information in an application demonstrating that the conditions of (a) of this subsection have been met. The application must be signed:

(i) By an authorized corporate officer in the case of a corporation;

(ii) By an authorized partner in the case of a limited or general partnership; or

(iii) By the proprietor in the case of a sole proprietorship.

(c) Ecology may verify the application information and if the owner or operator has made false statements, deny the fee reduction request and revoke previously granted fee reductions.

(d) For small businesses determined to be eligible under (a) of this subsection, the RACT analysis and determination fee shall be reduced to the greater of:

(i) Fifty percent of the RACT analysis and determination fee; or

(ii) Two hundred fifty dollars.

(e) If due to special economic circumstances, the fee reduction determined under (d) of this subsection imposes an extreme hardship on a small business, the small business may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. The factors which ecology may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the RACT analysis and determination fees through to customers; and average annual profits. In no case will a RACT analysis and determination fee be reduced below one hundred dollars.

(7) Fee reductions for pollution prevention initiatives. Ecology may reduce RACT analysis and determination fees for an individual source if that source is using approved pollution prevention measures.

(8) Fee payments. Fees specified in subsection (4)(a) of this section shall be paid at the time a notice of construction applications is submitted to the department. Other fees specified in subsections (2) through (7) of this section shall be paid no later than thirty days after receipt of an ecology billing statement. For fees specified in subsection (5) of this section, a billing for one-half of the payment from each source will be mailed when the source category rule-making effort is commenced as noted by publication of the CR101 form in the *Washington State Register.* A billing for the second half of the payment will be mailed when the proposed rule is published in the *Washington State Register.* No order of approval or other action approving or identifying a source to be at RACT will be issued by the department until all fees have been paid by the source. All fees collected under this regulation shall be made payable to the Washington department of ecology.

(9) Dedicated account. All control technology fees collected by the department from permit program sources shall be deposited in the air operating permit account created under RCW 70.94.015. All control technology fees collected by the department from nonpermit program sources shall be deposited in the air pollution control account.

(10) Tracking revenues, time, and expenditures. Ecology shall track revenues on a source-specific basis. For purposes of source-specific determinations under subsections (2) through (4) of this section, Ecology shall track time and expenditures on the basis of source complexity categories. For purposes of categorical determinations under subsection (5) of this section, ecology shall track time and expenditures on a source-category basis.

(11) Periodic review. Ecology shall review and, as appropriate, update this section at least once every two years.

[Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-045, filed 9/13/96, effective 10/14/96. Statutory Authority: RCW 70.94.153 and 70.94.154. 94-17-070, § 173-400-045, filed 8/15/94, effective 9/15/94.]

WAC 173-400-050 Emission standards for combustion and incineration units. (1) Combustion and incineration **emissions units** must meet all requirements of WAC 173-400-040 and, in addition, no **person** shall cause or permit **emissions** of **particulate matter** in excess of 0.23 gram per dry cubic meter at **standard conditions** (0.1 grain/dscf), except, for an **emissions unit** combusting wood derived fuels for the production of steam. No **person** shall allow or permit the **emission** of **particulate matter** in excess of 0.46 gram per dry cubic meter at **standard conditions** (0.2 grain/dscf), as measured by **EPA** method 5 in Appendix A to 40 CFR Part 60, (in effect on February 20, 2001) or approved procedures contained in *"**Source** Test Manual - Procedures For Compliance Testing,"* state of Washington, department of **ecology**, as of July 12, 1990, on file at ecology.

(2) For any **incinerator**, no **person** shall cause or permit **emissions** in excess of one hundred **ppm** of total carbonyls as measured by applicable **EPA** methods or acceptable procedures contained in *"**Source** Test Manual - Procedures for Compliance Testing,"* state of Washington, department of **ecology**, on file at **ecology**. **Incinerators** shall be operated only during daylight hours unless written permission to operate at other times is received from **ecology** or the **authority**.

(3) Measured concentrations for **combustion and incineration units** shall be adjusted for volumes corrected to seven percent oxygen, except when **ecology** or the **authority**

determines that an alternate oxygen correction factor is more representative of normal operations.

(4) **Commercial and industrial solid waste incineration units** constructed on or before November 30, 1999. (See WAC 173-400-115(2) for the requirements for a commercial and industrial solid waste incineration unit constructed after November 30, 1999, or modified or reconstructed after June 1, 2001.)

(a) Definitions.

(i) **"Commercial and industrial solid waste incineration (CISWI) unit"** means any combustion device that combusts commercial and industrial waste, as defined in this subsection. The boundaries of a CISWI unit are defined as, but not limited to, the commercial or industrial solid waste fuel feed system, grate system, flue gas system, and bottom ash. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the commercial and industrial solid waste hopper (if applicable) and extends through two areas: (A) The combustion unit flue gas system, which ends immediately after the last combustion chamber. (B) The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.

(ii) **"Commercial and industrial solid waste"** means solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility (including field erected, modular, and custom built incineration units operating with starved or excess air), or solid waste combusted in an air curtain incinerator without energy recovery that is a distinct operating unit of any commercial or industrial facility.

(b) Applicability. This section applies to incineration units that meet all three criteria:

(i) The incineration unit meets the definition of **CISWI unit** in this subsection.

(ii) The incineration unit commenced construction on or before November 30, 1999.

(iii) The incineration unit is not exempt under (c) of this subsection.

(c) The following types of incineration units are exempt from this subsection:

(i) *Pathological waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste as defined in 40 CFR 60.2265 (in effect on January 30, 2001) are not subject to this section if you meet the two requirements specified in (c)(i)(A) and (B) of this subsection.

(A) Notify the **permitting agency** that the unit meets these criteria.

(B) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit.

(ii) *Agricultural waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of agricultural wastes as defined in 40 CFR 60.2265 (in effect on January 30, 2001) are not subject to this subpart if you meet the two requirements specified in (c)(ii)(A) and (B) of this subsection.

(A) Notify the **permitting agency** that the unit meets these criteria.

(B) Keep records on a calendar quarter basis of the weight of agricultural waste burned, and the weight of all other fuels and wastes burned in the unit.

(iii) *Municipal waste combustion units.* Incineration units that meet either of the two criteria specified in (c)(iii)(A) and (B) of this subsection.

(A) Units are regulated under 40 CFR Part 60, subpart Ea or subpart Eb (in effect on July 1, 2000); Spokane County Air Pollution Control Authority Regulation 1, Section 6.17 (in effect on February 13, 1999); 40 CFR Part 60, subpart AAAA (adopted on December 6, 2000 and in effect on June 1, 2001); or WAC 173-400-050(5).

(B) Units burn greater than 30 percent municipal solid waste or refuse-derived fuel, as defined in 40 CFR Part 60, subparts Ea (in effect on July 1, 2000), Eb (in effect on July 1, 2000), and AAAA (adopted on December 6, 2000 and in effect on June 1, 2001), and WAC 173-400-050(5), and that have the capacity to burn less than 35 tons (32 megagrams) per day of municipal solid waste or refuse-derived fuel, if you meet the two requirements in (c)(iii)(B)(I) and (II) of this subsection.

(I) Notify the **permitting agency** that the unit meets these criteria.

(II) Keep records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight of all other fuels and wastes burned in the unit.

(iv) *Medical waste incineration units.* Incineration units regulated under 40 CFR Part 60, subpart Ec (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996) (in effect on July 1, 2000);

(v) *Small power production facilities.* Units that meet the three requirements specified in (c)(v)(A) through (C) of this subsection.

(A) The unit qualifies as a small power-production facility under section 3 (17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)).

(B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity.

(C) You notify the **permitting agency** that the unit meets all of these criteria.

(vi) *Cogeneration facilities.* Units that meet the three requirements specified in (c)(vi)(A) through (C) of this subsection.

(A) The unit qualifies as a cogeneration facility under section 3 (18)(B) of the Federal Power Act (16 U.S.C. 796 (18)(B)).

(B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.

(C) You notify the permitting agency that the unit meets all of these criteria.

(vii) *Hazardous waste combustion units.* Units that meet either of the two criteria specified in (c)(vii)(A) or (B) of this subsection.

(A) Units for which you are required to get a permit under section 3005 of the Solid Waste Disposal Act.

(B) Units regulated under subpart EEE of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors) (in effect on July 1, 2000).

(viii) *Materials recovery units.* Units that combust waste for the primary purpose of recovering metals, such as primary and secondary smelters;

(ix) *Air curtain incinerators.* Air curtain incinerators that burn only the materials listed in (c)(ix)(A) through (C) of this subsection are only required to meet the requirements under "Air Curtain Incinerators" in 40 CFR 60.2245 through 60.2260 (in effect on January 30, 2001).

(A) 100 percent wood waste.

(B) 100 percent clean lumber.

(C) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

(x) *Cyclonic barrel burners.* See 40 CFR 60.2265 (in effect on January 30, 2001).

(xi) *Rack, part, and drum reclamation units.* See 40 CFR 60.2265 (in effect on January 30, 2001).

(xii) *Cement kilns.* Kilns regulated under subpart LLL of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) (in effect on July 1, 2000).

(xiii) *Sewage sludge incinerators.* Incineration units regulated under 40 CFR Part 60, (Standards of Performance for Sewage Treatment Plants) (in effect on July 1, 2000).

(xiv) *Chemical recovery units.* Combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. The seven types of units described in (c)(xiv)(A) through (H) of this subsection are considered chemical recovery units.

(A) Units burning only pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process.

(B) Units burning only spent sulfuric acid used to produce virgin sulfuric acid.

(C) Units burning only wood or coal feedstock for the production of charcoal.

(D) Units burning only manufacturing by-product streams/residues containing catalyst metals which are reclaimed and reused as catalysts or used to produce commercial grade catalysts.

(E) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds.

(F) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes.

(G) Units burning only photographic film to recover silver.

(xv) *Laboratory analysis units.* Units that burn samples of materials for the purpose of chemical or physical analysis.

(d) Exceptions.

(i) Physical or operational changes to a CISWI unit made primarily to comply with this section do not qualify as a "modification" or "reconstruction" (as defined in 40 CFR 60.2815, in effect on January 30, 2001).

(ii) Changes to a CISWI unit made on or after June 1, 2001, that meet the definition of "modification" or "reconstruction" as defined in 40 CFR 60.2815 (in effect on January 30, 2001) mean the CISWI unit is considered a new unit and subject to WAC 173-400-115(2), which adopts 40 CFR Part 60, subpart CCCC by reference.

(e) A CISWI unit must comply with 40 CFR 60.2575 through 60.2875, in effect on January 30, 2001, which is adopted by reference. The federal rule contains these major components:

- Increments of progress towards compliance in 60.2575 through 60.2630;
- Waste management plan requirements in 60.2620 through 60.2630;
- Operator training and qualification requirements in 60.2635 through 60.2665;
- Emission limitations and operating limits in 60.2670 through 60.2685;
- Performance testing requirements in 60.2690 through 60.2725;
- Initial compliance requirements in 60.2700 through 60.2725;
- Continuous compliance requirements in 60.2710 through 60.2725;
- Monitoring requirements in 60.2730 through 60.2735;
- Recordkeeping and reporting requirements in 60.2740 through 60.2800;
- Title V operating permits requirements in 60.2805;
- Air curtain incinerator requirements in 60.2810 through 60.2870;
- Definitions in 60.2875; and
- Tables in 60.2875. In Table 1, the final control plan must be submitted before June 1, 2004, and final compliance must be achieved by June 1, 2005.

(i) Exception to adopting the federal rule. For purposes of this section, "administrator" includes the **permitting agency.**

(ii) Exception to adopting the federal rule. For purposes of this section, "you" means the owner or operator.

(iii) Exception to adopting the federal rule. For purposes of this section, each reference to "the effective date of state plan approval" means July 1, 2002.

(iv) Exception to adopting the federal rule. The Title V operating permit requirements in 40 CFR 2805(a) are not adopted by reference. Each CISWI unit, regardless of whether it is a major or nonmajor unit, is subject to the air operating permit regulation, chapter 173-401 WAC, beginning on July 1, 2002. See WAC 173-401-500 for the permit application requirements and deadlines.

(v) Exception to adopting the federal rule. The following compliance dates apply:

(A) The final control plan (Increment 1) must be submitted no later than July 1, 2003. (See Increment 1 in Table 1.)

(B) Final compliance (Increment 2) must be achieved no later than July 1, 2005. (See Increment 2 in Table 1.)

(5) **Small municipal waste combustion units** constructed on or before August 30, 1999. (See WAC 173-400-115(2) for the requirements for a municipal waste combustion unit constructed after August 30, 1999, or reconstructed or modified after June 6, 2001.)

(a) Definition. "Municipal waste combustion unit" means any setting or equipment that combusts, liquid, or gasified municipal solid waste including, but not limited to, field-erected combustion units (with or without heat recovery), modular combustion units (starved air- or excess-air), boilers (for example, steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air-curtain incinerators, or fluidized bed-fired), and pyrolysis/combustion units. Two criteria further define municipal waste combustion units:

(i) Municipal waste combustion units do not include the following units:

(A) Pyrolysis or combustion units located at a plastics or rubber recycling unit as specified under the exemptions in (d)(viii) and (ix) of this subsection.

(B) Cement kilns that combust municipal solid waste as specified under the exemptions in (d)(x) of this subsection.

(C) Internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

(ii) The boundaries of a municipal waste combustion unit are defined as follows. The municipal waste combustion unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustion unit water system. The municipal waste combustion unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine-generator set. The municipal waste combustion unit boundary starts at the municipal solid waste pit or hopper and extends through three areas:

(A) The combustion unit flue gas system, which ends immediately after the heat recovery equipment or, if there is no heat recovery equipment, immediately after the combustion chamber.

(B) The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.

(C) The combustion unit water system, which starts at the feed water pump and ends at the piping that exits the steam drum or superheater.

(b) Applicability. This section applies to a municipal waste combustion unit that meets these three criteria:

(i) The municipal waste combustion unit has the capacity to combust at least 35 tons per day of municipal solid waste but no more than 250 tons per day of municipal solid waste or refuse-derived fuel.

(ii) The municipal waste combustion unit commenced construction on or before August 30, 1999.

(iii) The municipal waste combustion unit is not exempt under (c) of this section.

(c) Exempted units. The following municipal waste combustion units are exempt from the requirements of this section:

(i) *Small municipal waste combustion units that combust less than 11 tons per day.* Units are exempt from this section if four requirements are met:

(A) The municipal waste combustion unit is subject to a federally enforceable permit limiting the amount of municipal solid waste combusted to less than 11 tons per day.

(B) The owner or operator notifies the **permitting agency** that the unit qualifies for the exemption.

(C) The owner or operator of the unit sends a copy of the federally enforceable permit to the **permitting agency**.

(D) The owner or operator of the unit keeps daily records of the amount of municipal solid waste combusted.

(ii) *Small power production units.* Units are exempt from this section if four requirements are met:

(A) The unit qualifies as a small power production facility under section 3 (17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)).

(B) The unit combusts homogeneous waste (excluding refuse-derived fuel) to produce electricity.

(C) The owner or operator notifies the **permitting agency** that the unit qualifies for the exemption.

(D) The owner or operator submits documentation to the **permitting agency** that the unit qualifies for the exemption.

(iii) *Cogeneration units.* Units are exempt from this section if four requirements are met:

(A) The unit qualifies as a small power production facility under section 3 (18)(C) of the Federal Power Act (16 U.S.C. 796 (18)(C)).

(B) The unit combusts homogeneous waste (excluding refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.

(C) The owner or operator notifies the **permitting agency** that the unit qualifies for the exemption.

(D) The owner or operator submits documentation to the **permitting agency** that the unit qualifies for the exemption.

(iv) *Municipal waste combustion units that combust only tires.* Units are exempt from this section if three requirements are met:

(A) The municipal waste combustion unit combusts a single-item waste stream of tires and no other municipal waste (the unit can cofire coal, fuel oil, natural gas, or other nonmunicipal solid waste).

(B) The owner or operator notifies the **permitting agency** that the unit qualifies for the exemption.

(C) The owner or operator submits documentation to the **permitting agency** that the unit qualifies for the exemption.

(v) *Hazardous waste combustion units.* Units are exempt from this section if the units have received a permit under section 3005 of the Solid Waste Disposal Act.

(vi) *Materials recovery units.* Units are exempt from this section if the units combust waste mainly to recover metals. Primary and secondary smelters may qualify for the exemption.

(vii) *Cofired units.* Units are exempt from this section if four requirements are met:

(A) The unit has a federally enforceable permit limiting municipal solid waste combustion to no more than 30 percent of total fuel input by weight.

(B) The owner or operator notifies the **permitting agency** that the unit qualifies for the exemption.

(C) The owner or operator submits a copy of the federally enforceable permit to the **permitting agency**.

(D) The owner or operator records the weights, each quarter, of municipal solid waste and of all other fuels combusted.

(viii) *Plastics/rubber recycling units.* Units are exempt from this section if four requirements are met:

(A) The pyrolysis/combustion unit is an integrated part of a plastics/rubber recycling unit as defined in 40 CFR 60.1940 (in effect on February 5, 2001).

(B) The owner or operator of the unit records the weight, each quarter, of plastics, rubber, and rubber tires processed.

(C) The owner or operator of the unit records the weight, each quarter, of feed stocks produced and marketed from chemical plants and petroleum refineries.

(D) The owner or operator of the unit keeps the name and address of the purchaser of the feed stocks.

(ix) *Units that combust fuels made from products of plastics/rubber recycling plants.* Units are exempt from this section if two requirements are met:

(A) The unit combusts gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquified petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feed stocks produced by plastics/rubber recycling units.

(B) The unit does not combust any other municipal solid waste.

(x) *Cement kilns.* Cement kilns that combust municipal solid waste are exempt.

(xi) *Air curtain incinerators.* If an air curtain incinerator as defined under 40 CFR 60.1910 (in effect on February 5, 2001) combusts 100 percent yard waste, then those units must only meet the requirements under 40 CFR 60.1910 through 60.1930 (in effect on February 5, 2001).

(d) Exceptions.

(i) Physical or operational changes to an existing municipal waste combustion unit made primarily to comply with this section do not qualify as a modification or reconstruction, as those terms are defined in 40 CFR 60.1940 (in effect on February 5, 2001).

(ii) Changes to an existing municipal waste combustion unit made on or after June 6, 2001, that meet the definition of modification or reconstruction, as those terms are defined in 40 CFR 60.1940 (in effect on February 5, 2001), mean the unit is considered a new unit and subject to WAC 173-400-115(2), which adopts 40 CFR Part 60, subpart AAAA (in effect on June 6, 2001).

(e) Municipal waste combustion units are divided into two subcategories based on the aggregate capacity of the municipal waste combustion plant as follows:

(i) Class I units. Class I units are small municipal waste combustion units that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See the definition of "municipal waste combustion plant capacity" in 40 CFR 60.1940 (in effect on February 5, 2001) for the specification of which units are included in the aggregate capacity calculation.

(ii) Class II units. Class II units are small municipal waste combustion units that are located at municipal waste combustion plants with an aggregate plant combustion capacity less than or equal to 250 tons per day of municipal solid waste. See the definition of "municipal waste combustion plant capacity" in 40 CFR 60.1940 (in effect on February 5, 2001) for the specification of which units are included in the aggregate capacity calculation.

(f) Compliance option 1.

(i) A municipal solid waste combustion unit may choose to reduce, by the final compliance date of June 1, 2005, the maximum combustion capacity of the unit to less than 35 tons per day of municipal solid waste. The owner or operator must submit a final control plan and the notifications of achievement of increments of progress as specified in 40 CFR 60.1610 (in effect on February 5, 2001).

(ii) The final control plan must, at a minimum, include two items:

(A) A description of the physical changes that will be made to accomplish the reduction.

(B) Calculations of the current maximum combustion capacity and the planned maximum combustion capacity after the reduction. Use the equations specified in 40 CFR 60.1935 (d) and (e) (in effect on February 5, 2001) to calculate the combustion capacity of a municipal waste combustion unit.

(iii) A permit restriction or a change in the method of operation does not qualify as a reduction in capacity. Use the equations specified in 40 CFR 60.1935 (d) and (e) (in effect on February 5, 2001) to calculate the combustion capacity of a municipal waste combustion unit.

(g) Compliance option 2. The municipal waste combustion unit must comply with 40 CFR 60.1585 through 60.1905, and 60.1935 (in effect on February 5, 2001), which is adopted by reference.

(i) The rule contains these major components:

(A) Increments of progress towards compliance in 60.1585 through 60.1640;

(B) Good combustion practices - operator training in 60.1645 through 60.1670;

(C) Good combustion practices - operator certification in 60.1675 through 60.1685;

(D) Good combustion practices - operating requirements in 60.1690 through 60.1695;

(E) Emission limits in 60.1700 through 60.1710;

(F) Continuous emission monitoring in 60.1715 through 60.1770;

(G) Stack testing in 60.1775 through 60.1800;

(H) Other monitoring requirements in 60.1805 through 60.1825;

(I) Recordkeeping reporting in 60.1830 through 60.1855;

(J) Reporting in 60.1860 through 60.1905;

(K) Equations in 60.1935;

(L) Tables 2 through 8.

(ii) Exception to adopting the federal rule. For purposes of this section, each reference to the following is amended in the following manner:

(A) "State plan" in the federal rule means WAC 173-400-050(5).

(B) "You" in the federal rule means the owner or operator.

(C) "Administrator" includes the **permitting agency**.

(D) Table 1 in (h)(ii) of this subsection substitutes for Table 1 in the federal rule.

(E) "The effective date of the state plan approval" in the federal rule means December 6, 2002.

(h) Compliance schedule.

(i) Small municipal waste combustion units must achieve final compliance or cease operation not later than December 1, 2005.

(ii) Small municipal waste combustion units must comply with Table 1.

Table 1 Compliance Schedules and Increments of Progress

Affected units	Increment 1 (Submit final control plan)	Increment 2 (Award contracts)	Increment 3 (Begin on-site construction)	Increment 4 (Complete on-site construction)	Increment 5 (Final compliance)
All Class I units	August 6, 2003	April 6, 2004	October 6, 2004	October 6, 2005	November 6, 2005
All Class II units	September 6, 2003	Not applicable	Not applicable	Not applicable	May 6, 2005

(iii) Class I units must comply with these additional requirements:

(A) The owner or operator must submit the dioxins/furans stack test results for at least one test conducted during or after 1990. The stack test must have been conducted according to the procedures specified under 40 CFR 60.1790 (in effect on February 5, 2001).

(B) Class I units that commenced construction after June 26, 1987, must comply with the dioxins/furans and mercury limits specified in Tables 2 and 3 in 40 CFR Part 60, subpart BBBB (in effect on February 5, 2001) by the later of two dates:

(I) December 6, 2003; or

(II) One year following the issuance of an order of approval (revised construction permit or operation permit) if a permit modification is required.

(i) Air operating permit. Applicability to chapter 173-401 WAC, the air operating permit regulation, begins on July 1, 2002. See WAC 173-401-500 for the permit application requirements and deadlines.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-050, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-050, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-050, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-050, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-050, filed 5/8/79; Order DE 76-38, § 173-400-050, filed 12/21/76. Formerly WAC 18-04-050.]

WAC 173-400-060 Emission standards for general process units. General process units are required to meet all applicable provisions of WAC 173-400-040 and, no **person** shall cause or permit the **emission** of **particulate** material from any general process operation in excess of 0.23 grams per dry cubic meter at **standard conditions** (0.1 grain/dscf) of exhaust gas. EPA test methods (in effect on February 20, 2001) from 40 CFR Parts 51, 60, 61, and 63 and any other approved test procedures which are contained in **ecology's** *"Source Test Manual - Procedures For Compliance Testing"* as of July 12, 1990, will be used to determine compliance.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-060, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-060, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-060, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-060, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-060, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-060, filed 8/20/80; Order DE 76-38, § 173-400-060, filed 12/21/76. Formerly WAC 18-04-060.]

WAC 173-400-070 Emission standards for certain source categories. Ecology finds that the reasonable regulation of **sources** within certain categories requires separate standards applicable to such categories. The standards set forth in this section shall be the maximum allowable standards for **emissions units** within the categories listed. Except as specifically provided in this section, such **emissions units** shall not be required to meet the provisions of WAC 173-400-040, 173-400-050 and 173-400-060.

(1) **Wigwam burners.**

(a) All wigwam burners shall meet all provisions of WAC 173-400-040 (2), (3), (4), (5), (6), and (7).

(b) All wigwam burners shall use **RACT**. All **emissions units** shall be operated and maintained to minimize **emissions**. These requirements may include a controlled tangential vent overfire air system, an adequate underfire system, elimination of all unnecessary openings, a controlled feed and other modifications determined necessary by **ecology** or the **authority**.

(c) It shall be unlawful to install or increase the existing use of any burner that does not meet all requirements for new **sources** including those requirements specified in WAC 173-400-040 and 173-400-050, except operating hours.

(d) **Ecology** may establish additional requirements for wigwam burners located in sensitive areas as defined by chapter 173-440 WAC. These requirements may include but shall not be limited to:

(i) A requirement to meet all provisions of WAC 173-400-040 and 173-400-050. Wigwam burners will be considered to be in compliance if they meet the requirements contained in WAC 173-400-040(1). An exception is made for a startup period not to exceed thirty minutes in any eight consecutive hours.

(ii) A requirement to apply **BACT**.

(iii) A requirement to reduce or eliminate **emissions** if **ecology** establishes that such **emissions** unreasonably interfere with the use and enjoyment of the property of others or are a cause of violation of **ambient air standards**.

(2) **Hog fuel boilers.**

(a) Hog fuel boilers shall meet all provisions of WAC 173-400-040 and 173-400-050(1), except that **emissions** may exceed twenty percent **opacity** for up to fifteen consecutive minutes once in any eight hours. The intent of this provision is to permit the soot blowing and grate cleaning necessary to the operation of these units. This practice is to be scheduled for the same specific times each day and **ecology** or the **authority** shall be notified of the schedule or any changes.

(b) All hog fuel boilers shall utilize **RACT** and shall be operated and maintained to minimize **emissions**.

(3) **Orchard heating.**

(a) Burning of rubber materials, asphaltic products, crankcase oil or petroleum wastes, plastic, or garbage is prohibited.

(b) It is unlawful to burn any material or operate any orchard-heating device that causes a visible **emission** exceeding twenty percent **opacity**, except during the first thirty minutes after such device or material is ignited.

(4) **Grain elevators.**

Any grain elevator which is primarily classified as a **materials handling** operation shall meet all the provisions of WAC 173-400-040 (2), (3), (4), and (5).

(5) **Catalytic cracking units.**

(a) All existing catalytic cracking units shall meet all provisions of WAC 173-400-040 (2), (3), (4), (5), (6), and (7) and:

(i) No **person** shall cause or permit the **emission** for more than three minutes, in any one hour, of an **air contaminant** from any catalytic cracking unit which at the **emission** point, or within a reasonable distance of the **emission** point, exceeds forty percent **opacity**.

(ii) No **person** shall cause or permit the **emission** of particulate material in excess of 0.46 grams per dry cubic meter at standard conditions (0.20 grains/dscf) of exhaust gas.

(b) All new catalytic cracking units shall meet all provisions of WAC 173-400-115.

(6) **Other wood waste burners.**

(a) Wood waste burners not specifically provided for in this section shall meet all provisions of WAC 173-400-040.

(b) Such wood waste burners shall utilize **RACT** and shall be operated and maintained to minimize **emissions**.

(7) **Sulfuric acid plants.**

No **person** shall cause to be discharged into the atmosphere from a sulfuric acid plant, any gases which contain acid mist, expressed as H_2SO_4, in excess of 0.15 pounds per ton of acid produced. Sulfuric acid production shall be expressed as one hundred percent H_2SO_4.

(8) **Sewage sludge incinerators.** Standards for the incineration of sewage sludge found in 40 CFR Part 503 subparts A (General Provisions) and E (Incineration) in effect on July 1, 1997, are adopted by reference.

(9) **Municipal solid waste landfills constructed, reconstructed, or modified before May 30, 1991.** A municipal solid waste landfill (MSW landfill) is an entire disposal facility in a contiguous geographical space where household waste is placed in or on the land. A MSW landfill may also receive other types of waste regulated under Subtitle D of the Federal Recourse Conservation and Recovery Act including the following: Commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. A MSW landfill may be either publicly or privately owned. A MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion. All references in this subsection to 40 CFR Part 60 rules mean those rules in effect on July 1, 2000.

(a) Applicability. These rules apply to each MSW landfill constructed, reconstructed, or modified before May 30, 1991; and the MSW landfill accepted waste at any time since November 8, 1987 or the landfill has additional capacity for future waste deposition. (See WAC 173-400-115(2) for the requirements for MSW landfills constructed, reconstructed, or modified on or after May 30, 1991.) Terms in this subsection have the meaning given them in 40 CFR 60.751, except that every use of the word "administrator" in the federal rules referred to in this subsection includes the **"permitting agency."**

(b) Exceptions. Any physical or operational change to an MSW landfill made solely to comply with these rules is not considered a modification or rebuilding.

(c) Standards for MSW landfill emissions.

(i) A MSW landfill having a design capacity less than 2.5 million megagrams or 2.5 million cubic meters must comply with the requirements of 40 CFR 60.752(a) in addition to the applicable requirements specified in this section.

(ii) A MSW landfill having design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must comply with the requirements of 40 CFR 60.752(b) in addition to the applicable requirements specified in this section.

(d) Recordkeeping and reporting. A MSW landfill must follow the recordkeeping and reporting requirements in 40 CFR 60.757 (submittal of an initial design capacity report) and 40 CFR 60.758 (recordkeeping requirements), as applicable, except as provided for under (d)(i) and (ii).

(i) The initial design capacity report for the facility is due before September 20, 2001.

(ii) The initial nonmethane organic compound (NMOC) emissions rate report is due before September 20, 2001.

(e) Test methods and procedures.

(i) A MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must calculate the landfill nonmethane organic compound emission rates following the procedures listed in 40 CFR 60.754, as applicable, to determine whether the rate equals or exceeds 50 megagrams per year.

(ii) Gas collection and control systems must meet the requirements in 40 CFR 60.752 (b)(2)(ii) through the following procedures:

(A) The systems must follow the operational standards in 40 CFR 60.753.

(B) The systems must follow the compliance provisions in 40 CFR 60.755 (a)(1) through (a)(6) to determine whether the system is in compliance with 40 CFR 60.752 (b)(2)(ii).

(C) The system must follow the applicable monitoring provisions in 40 CFR 60.756.

(f) Conditions. Existing MSW landfills that meet the following conditions must install a gas collection and control system:

(i) The landfill accepted waste at any time since November 8, 1987, or the landfill has additional design capacity available for future waste deposition;

(ii) The landfill has design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exception values. Any density conversions shall be documented and submitted with the report; and

(iii) The landfill has a nonmethane organic compound (NMOC) emission rate of 50 megagrams per year or greater.

(g) Change in conditions. After the adoption date of this rule, a landfill that meets all three conditions in (e) of this subsection must comply with all the requirements of this section within thirty months of the date when the conditions were met. This change will usually occur because the NMOC emission rate equaled or exceeded the rate of 50 megagrams per year.

(h) Gas collection and control systems.

(i) Gas collection and control systems must meet the requirements in 40 CFR 60.752 (b)(2)(ii).

(ii) The design plans must be prepared by a licensed professional engineer and submitted to the **permitting agency** within one year after the adoption date of this section.

(iii) The system must be installed within eighteen months after the submittal of the design plans.

(iv) The system must be operational within thirty months after the adoption date of this section.

(v) The emissions that are collected must be controlled in one of three ways:

(A) An open flare designed and operated according to 40 CFR 60.18;

(B) A control system designed and operated to reduce NMOC by 98 percent by weight; or

(C) An enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, dry basis to three percent oxygen, or less.

(i) Air operating permit.

(i) A MSW landfill that has a design capacity less than 2.5 million megagrams or 2.5 million cubic meters on January 7, 2000, is not subject to the air operating permit regulation, unless the landfill is subject to chapter 173-401 WAC for some other reason. If the design capacity of an exempted MSW landfill subsequently increases to equal or exceed 2.5 million megagrams or 2.5 million cubic meters by a change that is not a modification or reconstruction, the landfill is subject to chapter 173-401 WAC on the date the amended design capacity report is due.

(ii) A MSW landfill that has a design capacity equal to or greater than 2.5 million megagrams or 2.5 million cubic meters on January 7, 2000, is subject to chapter 173-401 WAC beginning on the effective date of this section. (Note: Under 40 CFR 62.14352(e), an applicable MSW landfill must have submitted its application so that by April 6, 2001, the permitting agency was able to determine that it was timely and complete. Under 40 CFR 70.7(b), no source may operate after the time that it is required to submit a timely and complete application.)

(iii) When a MSW landfill is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit for the landfill if the landfill is not subject to chapter 173-401 WAC for some other reason and if either of the following conditions are met:

(A) The landfill was never subject to the requirement for a control system under 40 CFR 62.14353; or

(B) The landfill meets the conditions for control system removal specified in 40 CFR 60.752 (b)(2)(v).

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-070, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-070, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-070, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-070, filed 9/13/96, effective 10/14/96; 91-05-064 (Order 90-06), § 173-400-070, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-070, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-070, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-070, filed 5/8/79; Order DE 76-38, § 173-400-070, filed 12/21/76. Formerly WAC 18-04-070.]

WAC 173-400-075 Emission standards for sources emitting hazardous air pollutants. (1) **National emission standards for hazardous air pollutants (NESHAPs).** 40 CFR Part 61 and Appendices in effect on May 15, 2002, is adopted by reference. The term "administrator" in 40 CFR Part 61 includes the **permitting agency**.

(2) The **permitting agency** may conduct source tests and require access to records, books, files, and other information specific to the control, recovery, or release of those pollutants regulated under 40 CFR Parts 61, 63 and/or 65 in order to determine the status of compliance of sources of these contaminants and to carry out its enforcement responsibilities.

(3) **Source** testing, monitoring, and analytical methods for sources of hazardous air pollutants must conform with the requirements of 40 CFR Parts 61, 63 and/or 65.

(4) This section does not apply to any source operating under a waiver granted by EPA or an exemption granted by the president of the United States.

(5) **Maximum achievable control technology (MACT) standards.** MACT standards are officially known as **National Emission Standards for Hazardous Air Pollutants for Source Categories**.

(a) Adopt by reference.

40 CFR Part 63 and Appendices in effect on May 15, 2002, is adopted by reference. Exceptions are listed in (5)(b) of this section.

The following list is provided for informational purposes:

Subpart A	General Provisions
Subpart B	Requirements for Control Technology Determinations for Major Sources in accordance with Clean Air Act Sections 112(g) and 112(j)
Subpart D	Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants
Subpart F	National Emissions Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry
Subpart G	National Emissions Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry: Process Vents, Storage Vessels, Transfer Operations, and Wastewater
Subpart H	National Emissions Standards for Organic Hazardous Air Pollutants for the Equipment Leaks
Subpart I	National Emissions Standards for Organic Hazardous Air Pollutants for certain Processes Subject to the Negotiated Regulation for Equipment Leaks
Subpart L	National Emissions Standards for Coke Oven Batteries
Subpart M	National Perchloroethylene Air Emissions Standards for Dry Cleaning Facilities (as applicable to major sources)
Subpart N	National Emissions Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks
Subpart O	Ethylene Oxide Emissions Standards for Sterilization Facilities
Subpart Q	National Emissions Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers
Subpart R	Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)
Subpart S	National Emissions Standards for Hazardous Air Pollutants from Pulp and Paper Industry
Subpart T	National Emissions Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning Machines
Subpart U	National Emissions Standards for Hazardous Air Pollutants: Group I Polymers and Resins
Subpart W	National Emissions Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production
Subpart X	National Emissions Standards for Hazardous Air Pollutants for Secondary Lead Smelting
Subpart Y	National Emissions Standards for Marine Tank Vessel Loading Operations
Subpart AA	National Emissions Standards for Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants
Subpart BB	National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizers Production Plants
Subpart CC	National Emissions Standards for Hazardous Air Pollutants from Petroleum Refineries
Subpart DD	National Emissions Standards for Hazardous Air Pollutants from Off-site Waste and Recovery Treatment Operations
Subpart EE	National Emissions Standards for Magnetic Tape Manufacturing Operations
Subpart GG	National Emissions Standards for the Aerospace Manufacturing and Rework Facilities
Subpart HH	National Emissions Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities
Subpart II	Shipbuilding and Ship Repair (surface coating)
Subpart JJ	National Emissions Standards for Wood Furniture Manufacturing Operations
Subpart KK	National Emissions Standards for Printing and Publishing Industry
Subpart LL	National Emissions Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants
Subpart MM	National Emissions Standards for Hazardous Air Pollutants from Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semi-chemical Pulp Mills
Subpart OO	National Emissions Standards for Tanks - Level 1
Subpart PP	National Emissions Standards for Containers
Subpart QQ	National Emissions Standards for Surface Impoundments
Subpart RR	National Emissions Standards for Individual Drain Systems
Subpart SS	National Emissions Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process
Subpart TT	National Emissions Standards for Equipment Leaks - Control Level 1
Subpart UU	National Emissions Standards for Equipment Leaks - Control Level 2 Standards
Subpart VV	National Emissions Standards for Oil-Water Separators and Organic Water Separators
Subpart WW	National Emissions Standards for Storage Vessels (Tanks) - Control Level 2
Subpart YY	National Emissions Standards for Hazardous Air Pollutants: Generic Maximum Achievable Control Technology Standards

Subpart CCC	National Emissions Standards for Hazardous Air Pollutants for Steel Pickling - HCL Process Facilities and Hydrochloric Acid Regeneration Plants
Subpart DDD	National Emissions Standards for Hazardous Air Pollutants for Mineral Wool Production
Subpart EEE	National Emissions Standards for Hazardous Air Pollutants from Hazardous Waste Combustors
Subpart GGG	National Emissions Standards for Pharmaceuticals Production
Subpart HHH	National Emissions Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities
Subpart III	National Emissions Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production
Subpart JJJ	National Emissions Standards for Hazardous Air Pollutants: Group IV Polymers and Resins
Subpart LLL	National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry
Subpart MMM	National Emissions Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production
Subpart NNN	National Emissions Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing
Subpart OOO	National Emissions Standards for Hazardous Air Pollutants for Manufacture of Amino/Phenolic Resins
Subpart PPP	National Emissions Standards for Hazardous Air Pollutants for Polyether Polyols Production
Subpart RRR	National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production. Under WAC 173-401-300 (1)(d), area sources are deferred from the air operating permit regulation until December 4, 2004
Subpart TTT	National Emissions Standards for Hazardous Air Pollutants for Primary Lead Smelting
Subpart UUU	National Emissions Standards for Hazardous Air Pollutants from Petroleum Refineries—Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
Subpart VVV	National Emissions Standards for Hazardous Air Pollutants from Publicly Owned Treatment Works
Subpart XXX	National Emissions Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese
Subpart CCCC	National Emissions Standards for Hazardous Air Pollutants for Manufacturing of Nutritional Yeast
Subpart GGGG	National Emissions Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production
Subpart HHHH	National Emissions Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production
Subpart TTTT	National Emissions Standards for Hazardous Air Pollutants for Leather Finishing Operations
Subpart VVVV	National Emissions Standards for Hazardous Air Pollutants for Boat Manufacturing
Appendix A	Test Methods
Appendix B	Sources Defined for Early Reduction Provisions
Appendix C	Determination of the Fraction Biodegraded (F_{bio}) in a Biological Treatment Unit
Appendix D	Alternative Validation Procedure for EPA Waste and Wastewater Methods
Appendix E	Monitoring Procedures for Nonthoroughly Mixed Open Biological Treatment Systems at Kraft Pulp Mills Under Unsafe Sampling Conditions

(b) Exceptions to adopting 40 CFR Part 63 by reference.

(i) The term "administrator" in 40 CFR Part 63 includes the **permitting agency**.

(ii) The following subparts of 40 CFR Part 63 are not adopted by reference:

(A) Subpart C: List of Hazardous Air Pollutants, Petition Process, Lesser Quantity Designations, source Category List.

(B) Subpart E: Approval of State Programs and Delegation of Federal Authorities.

(C) Subpart M: National Perchloroethylene Emission Standards for Dry Cleaning Facilities as it applies to nonmajor sources.

(6) **Consolidated requirements for the synthetic organic chemical manufacturing industry.** 40 CFR Part 65, in effect on July 1, 2001, is adopted by reference.

(7) **Emission Standards for Perchloroethylene Dry Cleaners.**

(a) **Applicability.**

(i) This section applies to all dry cleaning systems that use perchloroethylene (PCE). Table 1 divides dry cleaning facilities into 3 regulatory **source categories** by the type of equipment they use and the volume of PCE purchased. Each dry cleaning system must follow the applicable requirements in Table 1:

TABLE 1. PCE Dry Cleaner Source Categories

Dry cleaning facilities with:	Small area source purchases less than:	Large area source purchases between:	Major source purchases more than:
(1) Only Dry-to-Dry Machines	140 gallons PCE/yr	140-2,100 gallons PCE/yr	2,100 gallons PCE/yr
(2) Only Transfer Machines	200 gallons PCE/yr	200-1,800 gallons PCE/yr	1,800 gallons PCE/yr
(3) Both Dry-to-Dry and Transfer Machines	140 gallons PCE/yr	140-1,800 gallons PCE/yr	1,800 gallons PCE/yr

(ii) Major sources. In addition to the requirements in this section, a dry cleaning system that is considered a major source according to Table 1 must follow the federal requirements for major sources in 40 CFR Part 63, Subpart M (in effect on July 1, 2001).

(b) **Operations and maintenance record.**

(i) Each dry cleaning facility must keep an operations and maintenance record that is available upon request.

(ii) The information in the operations and maintenance record must be kept on-site for five years.

(iii) The operations and maintenance record must contain the following information:

(A) Inspection: The date and result of each inspection of the dry cleaning system. The inspection must note the condition of the system and the time any leaks were observed.

(B) Repair: The date, time, and result of each repair of the dry cleaning system.

(C) Refrigerated condenser information. If you have a refrigerated condenser, enter this information:

(I) The air temperature at the inlet of the refrigerated condenser;

(II) The air temperature at the outlet of the refrigerated condenser;

(III) The difference between the inlet and outlet temperature readings; and

(IV) The date the temperature was taken.

(D) Carbon adsorber information. If you have a carbon adsorber, enter this information:

(I) The concentration of PCE in the exhaust of the carbon adsorber; and

(II) The date the concentration was measured.

(E) A record of the volume of PCE purchased each month must be entered by the first of the following month;

(F) A record of the total amount of PCE purchased over the previous twelve months must be entered by the first of each month;

(G) All receipts of PCE purchases; and

(H) A record of any pollution prevention activities that have been accomplished.

(c) **General operations and maintenance requirements.**

(i) Drain cartridge filters in their housing or other sealed container for at least twenty-four hours before discarding the cartridges.

(ii) Close the door of each dry cleaning machine except when transferring articles to or from the machine.

(iii) Store all PCE, and wastes containing PCE, in a closed container with no perceptible leaks.

(iv) Operate and maintain the dry cleaning system according to the manufacturer's specifications and recommendations.

(v) Keep a copy on-site of the design specifications and operating manuals for all dry cleaning equipment.

(vi) Keep a copy on-site of the design specifications and operating manuals for all emissions control devices.

(vii) Route the PCE gas-vapor stream from the dry cleaning system through the applicable equipment in Table 2:

TABLE 2. Minimum PCE Vapor Vent Control Requirements

Small area source	Large area source	Major source
Refrigerated condenser for all machines installed after September 21, 1993.	Refrigerated condenser for all machines.	Refrigerated condenser with a carbon adsorber for all machines installed after September 21, 1993.

(d) **Inspection.**

(i) The owner or operator must inspect the dry cleaning system at a minimum following the requirements in Table 3:

TABLE 3. Minimum Inspection Frequency

Small area source	Large area source	Major source
Once every 2 weeks.	Once every week.	Once every week.

(ii) An inspection must include an examination of these components for condition and perceptible leaks:

(A) Hose and pipe connections, fittings, couplings, and valves;

(B) Door gaskets and seatings;

(C) Filter gaskets and seatings;

(D) Pumps;

(E) Solvent tanks and containers;

(F) Water separators;

(G) Muck cookers;

(H) Stills;

(I) Exhaust dampers; and

(J) Cartridge filter housings.

(iii) The dry cleaning system must be inspected while it is operating.

(iv) The date and result of each inspection must be entered in the operations and maintenance record at the time of the inspection.

(e) **Repair.**

(i) Leaks must be repaired within twenty-four hours of detection if repair parts are available.

(ii) If repair parts are unavailable, they must be ordered within two working days of detecting the leak.

(iii) Repair parts must be installed as soon as possible, and no later than five working days after arrival.

(iv) The date and time each leak was discovered must be entered in the operations and maintenance record.

(v) The date, time, and result of each repair must be entered in the operations and maintenance record at the time of the repair.

(f) **Requirements for systems with refrigerated condensers.** A dry cleaning system using a refrigerated condenser must meet all of the following requirements:

(i) Outlet air temperature.

(A) Each week the air temperature sensor at the outlet of the refrigerated condenser must be checked.

(B) The air temperature at the outlet of the refrigerated condenser must be less than or equal to 45°F (7.2°C) during the cool-down period.

(C) The air temperature must be entered in the operations and maintenance record manual at the time it is checked.

(D) The air temperature sensor must meet these requirements:

(I) An air temperature sensor must be permanently installed on a dry-to-dry machine, dryer or reclaimer at the outlet of the refrigerated condenser. The air temperature sensor must be installed by September 23, 1996, if the dry cleaning system was constructed before December 9, 1991.

(II) The air temperature sensor must be accurate to within 2°F (1.1°C).

(III) The air temperature sensor must be designed to measure at least a temperature range from 32°F (0°C) to 120°F (48.9°C); and

(IV) The air temperature sensor must be labeled "RC outlet."

(ii) Inlet air temperature.

(A) Each week the air temperature sensor at the inlet of the refrigerated condenser installed on a washer must be checked.

(B) The inlet air temperature must be entered in the operations and maintenance record at the time it is checked.

(C) The air temperature sensor must meet these requirements:

(I) An air temperature sensor must be permanently installed on a washer at the inlet of the refrigerated condenser. The air temperature sensor must be installed by September 23, 1996, if the dry cleaning system was constructed before December 9, 1991.

(II) The air temperature sensor must be accurate to within 2°F (1.1°C).

(III) The air temperature sensor must be designed to measure at least a temperature range from 32°F (0°C) to 120°F (48.9°C).

(IV) The air temperature sensor must be labeled "RC inlet."

(iii) For a refrigerated condenser used on the washer unit of a transfer system, the following are additional requirements:

(A) Each week the difference between the air temperature at the inlet and outlet of the refrigerated condenser must be calculated.

(B) The difference between the air temperature at the inlet and outlet of a refrigerated condenser installed on a washer must be greater than or equal to 20°F (11.1°C).

(C) The difference between the inlet and outlet air temperature must be entered in the operations and maintenance record each time it is checked.

(iv) A converted machine with a refrigerated condenser must be operated with a diverter valve that prevents air drawn into the dry cleaning machine from passing through the refrigerated condenser when the door of the machine is open;

(v) The refrigerated condenser must not vent the air-PCE gas-vapor stream while the dry cleaning machine drum is rotating or, if installed on a washer, until the washer door is opened; and

(vi) The refrigerated condenser in a transfer machine may not be coupled with any other equipment.

(g) **Requirements for systems with carbon adsorbers.** A dry cleaning system using a carbon adsorber must meet all of the following requirements:

(i) Each week the concentration of PCE in the exhaust of the carbon adsorber must be measured at the outlet of the carbon adsorber using a colorimetric detector tube.

(ii) The concentration of PCE must be written in the operations and maintenance record each time the concentration is checked.

(iii) If the dry cleaning system was constructed before December 9, 1991, monitoring must begin by September 23, 1996.

(iv) The colorimetric tube must meet these requirements:

(A) The colorimetric tube must be able to measure a concentration of 100 parts per million of PCE in air.

(B) The colorimetric tube must be accurate to within 25 parts per million.

(C) The concentration of PCE in the exhaust of the carbon adsorber must not exceed 100 ppm while the dry cleaning machine is venting to the carbon adsorber at the end of the last dry cleaning cycle prior to desorption of the carbon adsorber.

(v) If the dry cleaning system does not have a permanently fixed colorimetric tube, a sampling port must be provided within the exhaust outlet of the carbon adsorber. The sampling port must meet all of these requirements:

(A) The sampling port must be easily accessible;

(B) The sampling port must be located 8 stack or duct diameters downstream from a bend, expansion, contraction or outlet; and

(C) The sampling port must be 2 stack or duct diameters upstream from a bend, expansion, contraction, inlet or outlet.

[Statutory Authority: RCW 70.94.331. 02-15-068 (Order 02-09), § 173-400-075, filed 7/11/02, effective 8/11/02. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-075, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-075, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-075, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-075, filed 9/13/96, effective 10/14/96; 93-05-044 (Order 92-34), § 173-400-075, filed 2/17/93, effective 3/20/93; 91-05-064 (Order 90-

06), § 173-400-075, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-075, filed 3/6/85. Statutory Authority: Chapter 70.94 RCW. 84-10-019 (Order DE 84-8), § 173-400-075, filed 4/26/84. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-075, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-075, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-075, filed 5/8/79; Order DE 76-38, § 173-400-075, filed 12/21/76. Formerly WAC 18-04-075.]

WAC 173-400-081 Startup and shutdown. In promulgating technology-based emission standards and making control technology determinations (e.g., BACT, RACT, LAER, BART) ecology and the authorities shall consider any physical constraints on the ability of a source to comply with the applicable standard during startup or shutdown. Where ecology or the authority determines that the source or source category, operated and maintained in accordance with good air pollution control practice, is not capable of achieving continuous compliance with an emission standard during startup or shutdown, ecology or the authority shall include in the standard appropriate emission limitations, operating parameters, or other criteria to regulate the performance of the source during startup or shutdown conditions. In modeling the emissions of a source for purposes of demonstrating attainment or maintenance of national ambient air quality standards, ecology and the authorities shall take into account any incremental increase in allowable emissions under startup or shutdown conditions authorized by an emission limitation or other operating parameter adopted under this rule. Any emission limitation or other parameter adopted under this rule which increases allowable emissions during startup or shutdown conditions over levels authorized in an approved state implementation plan shall not take effect until approved by EPA as a SIP amendment.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-081, filed 8/20/93, effective 9/20/93.]

WAC 173-400-091 Voluntary limits on emissions. (1) Upon request by the owner or operator of a source, ecology or the authority with jurisdiction over the source shall issue a regulatory order that limits the source's potential to emit any air contaminant or contaminants to a level agreed to by the owner or operator and ecology or the authority with jurisdiction over the source.

(2) A condition contained in an order issued under this section shall be less than the source's otherwise allowable annual emissions of a particular contaminant under all applicable requirements of the chapter 70.94 RCW and the FCAA, including any standard or other requirement provided for in the Washington state implementation plan. The term "condition" refers to limits on production or other limitations, in addition to emission limitations.

(3) Any order issued under this section shall include monitoring, recordkeeping and reporting requirements sufficient to ensure that the source complies with any condition established under this section. Monitoring requirements shall use terms, test methods, units, averaging periods, and other statistical conventions consistent with the requirements of WAC 173-400-105.

(4) Any order issued under this section shall be subject to the notice and comment procedures under WAC 173-400-171.

(5) The terms and conditions of a regulatory order issued under this section shall be federally enforceable, upon approval of this section as an element of the Washington state implementation plan. Any proposed deviation from a condition contained in an order issued under this section shall require revision or revocation of the order.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-091, filed 8/20/93, effective 9/20/93.]

WAC 173-400-099 Registration program. (1) Program purpose. The registration program is a program to develop and maintain a current and accurate record of air contaminant sources. Information collected through the registration program is used to evaluate the effectiveness of air pollution control strategies and to verify source compliance with applicable air pollution requirements.

(2) Program components. The components of the registration program consist of:

(a) Initial registration and annual or other periodic reports from stationary source owners providing information on location, size, height of contaminant outlets, processes employed, nature and quantity of the air contaminant emissions, and other information that is relevant to air pollution and available or reasonably capable of being assembled. For purposes of this chapter, information relevant to air pollution may include air pollution requirements established by rule, regulatory order, or ordinance pursuant to chapter 70.94 RCW.

(b) On-site inspections necessary to verify compliance with registration requirements.

(c) Data storage and retrieval systems necessary for support of the registration program.

(d) Emission inventory reports and emission reduction credits computed from information provided by source owners pursuant to registration requirements.

(e) Staff review, including engineering analysis for accuracy and currentness of information provided by source owners pursuant to registration program requirements.

(f) Clerical and other office support in direct furtherance of the registration program.

(g) Administrative support provided in directly carrying out the registration program.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-099, filed 3/22/95, effective 4/22/95.]

WAC 173-400-100 Source classifications. (1) **Source classification list.** In counties without a local **authority**, the owner or operator of each **source** within the following **source categories** shall register the **source** with **ecology**:

(a) Agricultural chemical facilities engaging in the manufacturing of liquid or dry fertilizers or pesticides;

(b) Agricultural drying and dehydrating operations;

(c) Any category of **stationary sources** subject to a **new source performance standard (NSPS)** under 40 CFR Part 60, other than Subpart AAA (Standards of Performance for New Residential Wood Heaters);

(d) Any **source** subject to a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** under 40 CFR Part 61, other than Subpart M (National Emission Standard for Asbestos);

(e) Any **source** subject to a **National Emission Standard for Hazardous Air Pollutants for Source Categories** (Maximum Achievable Control Technology (MACT) standard) under 40 CFR Part 63;

(f) Any **source, stationary source** or **emission unit** with an emission rate defined as **"significant"** in WAC 173-400-112 and/or 173-400-113, as applicable;

(g) Asphalt and asphalt products production facilities;

(h) Brick and clay manufacturing plants, including tiles and ceramics;

(i) Casting facilities and foundries, ferrous and nonferrous;

(j) Cattle feedlots with operational facilities which have an inventory of one thousand or more cattle in operation between June 1 and October 1, where vegetation forage growth is not sustained over the majority of the lot during the normal growing season;

(k) Chemical manufacturing plants;

(l) Composting operations, including commercial, industrial and municipal, but exempting residential composting activities;

(m) Concrete product manufacturers and ready mix and premix concrete plants;

(n) Crematoria or animal carcass **incinerators**;

(o) Dry cleaning plants;

(p) **Materials handling** and transfer facilities that generate fine particulate, which may include pneumatic conveying, cyclones, baghouses, and industrial housekeeping vacuuming systems that exhaust to the atmosphere;

(q) Flexible vinyl and urethane coating and printing operations;

(r) Grain, seed, animal feed, legume, and flour processing operations, and handling facilities;

(s) Hay cubers and pelletizers;

(t) Hazardous waste treatment and disposal facilities;

(u) Ink manufacturers;

(v) Insulation fiber manufacturers;

(w) Landfills, active and inactive, including covers, gas collections systems or flares;

(x) Metal plating and anodizing operations;

(y) Metallic and nonmetallic mineral processing plants, including rock crushing plants;

(z) Mills such as lumber, plywood, shake, shingle, woodchip, veneer operations, dry kilns, pulpwood insulating board, or any combination thereof;

(aa) Mineralogical processing plants;

(bb) Other metallurgical processing plants;

(cc) Paper manufacturers;

(dd) Petroleum refineries;

(ee) Plastics and fiberglass product fabrication facilities;

(ff) Rendering plants;

(gg) Soil and groundwater remediation projects;

(hh) Surface coating manufacturers;

(ii) Surface coating operations including: Automotive, metal, cans, pressure sensitive tape, labels, coils, wood, plastic, rubber, glass, paper and other substrates;

(jj) Synthetic fiber production facilities;

(kk) Synthetic organic chemical manufacturing industries;

(ll) Tire recapping facilities;

(mm) Wastewater treatment plants;

(nn) Any **source** that has elected to opt-out of the operating permit program by limiting its potential-to-emit **(synthetic minor)** or is required to report periodically to demonstrate nonapplicability to **EPA** requirements under Sections 111 or 112 of Federal Clean Air Act.

(2) **Equipment classification list.** In counties without a local **authority**, the owner or operator of the following equipment shall register the **source** with **ecology**:

(a) Boilers, all solid and liquid fuel burning boilers with the exception of those utilized for residential heating;

(b) Boilers, all gas fired boilers above 10 million British thermal units per hour input;

(c) Chemical concentration evaporators;

(d) Degreasers of the cold or vapor type in which more than five percent of the solvent is comprised of halogens or such aromatic hydrocarbons as benzene, ethylbenzene, toluene or xylene;

(e) Ethylene oxide (ETO) sterilizers;

(f) Flares utilized to combust any gaseous material;

(g) Fuel burning equipment with a heat input of more than 1 million Btu per hour; except heating, air conditioning systems, or ventilating systems not designed to remove contaminants generated by or released from equipment;

(h) **Incinerators** designed for a capacity of one hundred pounds per hour or more;

(i) Ovens, burn-out and heat-treat;

(j) Stationary internal combustion engines and turbines rated at five hundred horsepower or more;

(k) Storage tanks for organic liquids associated with commercial or industrial facilities with capacities equal to or greater than 40,000 gallons;

(l) Vapor collection systems within commercial or industrial facilities;

(m) Waste oil burners above 0.5 mm Btu heat output;

(n) Woodwaste **incinerators**;

(o) Commercial and industrial solid waste incineration units subject to WAC 173-400-050(4);

(p) Small municipal waste combustion units subject to WAC 173-400-050(5).

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-100, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-100, filed 3/22/95, effective 4/22/95; 93-18-007 (Order 93-03), § 173-400-100, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-100, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-100, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-100, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-100, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-100, filed 5/8/79; Order DE 76-38, § 173-400-100, filed 12/21/76. Formerly WAC 18-04-100.]

WAC 173-400-101 Registration issuance. (1) General. Any person operating or responsible for the operation of an air contaminant source for which registration and reporting are required shall register the source emission unit with ecology or the authority. The owner or operator shall make reports containing information as may be required by ecology or the authority concerning location, size and height of contaminant outlets, processes employed, nature and quantity of the air contaminant emission and such other information as is relevant to air pollution and available or reasonably capable of being assembled.

(2) Registration form. Registration information shall be provided on forms supplied by ecology or the authority and shall be completed and returned within the time specified on the form. Emission units within the facility shall be listed separately unless ecology or the authority determines that certain emission units may be combined into process streams for purposes of registration and reporting.

(3) Signatory responsibility. The owner, operator, or their designated management representative shall sign the registration form for each source. The owner or operator of the source shall be responsible for notifying ecology or the authority of the existence of the source, and for the accuracy, completeness, and timely submittal of registration reporting information and any accompanying fee.

(4) Operational and maintenance plan. Owners or operators of registered sources within ecology's jurisdiction shall maintain an operation and maintenance plan for process and control equipment. The plan shall reflect good industrial practice and shall include a record of performance and periodic inspections of process and control equipment. In most instances, a manufacturer's operations manual or an equipment operation schedule may be considered a sufficient operation and maintenance plan. The plan shall be reviewed and updated by the source owner or operator at least annually. A copy of the plan shall be made available to ecology upon request.

(5) Report of closure. A report of closure shall be filed with ecology or the authority within ninety days after operations producing emissions permanently cease at any applicable source under this section.

(6) Report of change of ownership. A new owner or operator shall report to ecology or the authority within ninety days of any change of ownership or change in operator.

(7) Operating permit program source exemption. Permit program sources, as defined in RCW 70.94.030(17), are not required to comply with the registration requirements of WAC 173-400-100 through 173-400-104.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-101, filed 3/22/95, effective 4/22/95; 94-10-042 (Order 93-39), § 173-400-101, filed 4/29/94, effective 5/30/94.]

WAC 173-400-102 Scope of registration and reporting requirements. (1) **Administrative options.** A **source** in a listed **source category** that is located in a county without an active local **authority** will be addressed in one of several ways:

(a) The **source** will be required to register and report once each year. The criteria for identifying these **sources** are listed in subsection (2) of this section.

(b) The **source** will be required to register and report once every three years. The criteria for identifying these **sources** are listed in subsection (3) of this section.

(c) The **source** will be exempted from registration program requirements. The criteria for identifying these **sources** are listed in subsection (4) of this section.

(2) **Sources requiring annual registration and inspections.** An owner or operator of a **source** in a listed **source category** that meets any of the following criteria shall register and report once each year:

(a) The **source** emits one or more **air pollutants** at rates greater than the emission rates listed in the definition of **"significant"** in WAC 173-400-112 and/or 173-400-113, as applicable;

(b) Annual registration and reporting is necessary to comply with federal reporting requirements or **emission standards**; or

(c) Annual registration and reporting is required in a **reasonably available control technology** determination for the **source category**; or

(d) The **director** of **ecology** determines that the **source** poses a potential threat to human health and the environment.

(3) **Sources requiring periodic registration and inspections.** An owner or operator of a **source** in a listed **source category** that meets any of the following criteria shall register and report once every three years:

(a) The **source** emits one or more **air pollutants** at rates greater than the emission rates listed in subsection (5) of this section and all **air pollutants** at rates less than the emission rates listed in the definition of **"significant"** in WAC 173-400-112 and/or 173-400-113, as applicable; or

(b) The **source** emits measurable amounts of one or more Class A or Class B **toxic air pollutants** listed in WAC 173-460-150 and 173-460-160.

(4) **Sources exempt from registration program requirements.** Any **source** included in a listed **source category** that is located in a county without an active local air **authority** shall not be required to register if **ecology** determines the following:

(a) The **source** emits pollutants below **emission** rates specified in subsection (5) of this section; and

(b) The **source** or **emission unit** does not emit measurable amounts of Class A or Class B **toxic air pollutants** specified in WAC 173-460-150 and 173-460-160.

(5) **Criteria for defining exempt sources.** The following emission rates will be used to identify listed **sources** that are exempt from registration program requirements:

Pollutant	Tons/Year
Carbon Monoxide	5.0
Nitrogen oxides	2.0
Sulfur dioxide	2.0
Particulate Matter (PM)	1.25
Fine Particulate **(PM10)**	0.75
Volatile organic compounds (VOC)	2.0
Lead	0.005

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-102, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-102, filed 3/22/95, effective 4/22/95.]

WAC 173-400-103 Emission estimates. (1) Procedure for estimating emissions. In counties without an active local air pollution control authority, registration may include an estimate of actual emissions taking into account equipment, operating conditions, and air pollution control measures. Registration may also include a flowchart of plant processes, operational parameters, and specifications of air pollution control equipment. The emissions estimate shall be based upon actual test data or, in the absence of such data, upon procedures acceptable to ecology. Any emission data submitted to ecology shall be verifiable using currently accepted engineering criteria. The following procedures may be used to estimate emissions from individual sources or emissions units:

(a) Source-specific testing data;

(b) Mass balance calculations;

(c) A published, verifiable emission factor that is applicable to the source;

(d) Other engineering calculations; or

(e) Other procedures to estimate emissions that are acceptable to ecology.

(2) Owner or operator review. Ecology will provide the owner or operator of the source an opportunity to review any emission estimates prepared by ecology. An owner or operator may submit additional information and any justification for not using the methods listed above. This information will be evaluated by ecology to determine whether it is based on currently accepted engineering criteria. If none of the above methods are available or applicable to the source, an appropriate method will be established and approved by ecology on a case-by-case basis.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-103, filed 3/22/95, effective 4/22/95.]

WAC 173-400-104 Registration fees. (1) Registration fee determination. In counties without an active local air pollution control authority, ecology shall establish registration fees based on workload using the process outlined below. The fees collected shall be sufficient to cover the direct and indirect costs of administering the registration program within ecology's jurisdiction.

(2) Budget preparation. Ecology shall conduct a workload analysis projecting resource requirements for administering the registration program. Workload estimates shall be prepared on a biennial basis and shall estimate the resources required to perform registration program activities listed in WAC 173-400-099(2). Ecology shall prepare a budget for administering the registration program using workload estimates identified in the workload analysis for the biennium.

(3) Registration fee schedule. Ecology's registration program budget shall be distributed to sources located in its jurisdiction according to the following:

(a) Sources requiring periodic registration and inspections shall pay an annual registration fee of four hundred dollars.

(b) Sources requiring annual registration and inspections shall pay a registration fee comprised of the following three components:

(i) Flat component. This portion of a source's fee shall be calculated by the equal division of thirty-five percent of the budget amount allocated to annual registration sources by the total number of sources requiring annual registration.

(ii) Complexity component. Each source is assigned a complexity rating of 1, 3, or 5 which is based on the estimated amount of time needed to review and inspect the source. This portion of the fee is calculated by dividing forty percent of the budget amount allocated to annually registered sources by the total complexity of sources located in ecology's jurisdiction. The quotient is then multiplied by an individual source's complexity rating to determine that source's complexity portion of the fee.

(iii) Emissions component. This portion of a source's fee is calculated by dividing twenty-five percent of the budget amount allocated to annually registered sources by the total billable emissions from those sources. The quotient is then multiplied by an individual source's billable emissions to determine that source's emissions portion of the fee. Billable emissions include all air pollutants except carbon monoxide and total suspended particulate.

(4) Regulatory orders. Owners or operators registering a source as a synthetic minor must obtain a regulatory order which limits the source's emissions. The owner will be required to pay a fee based on the amount of time required to research and write the order multiplied by an hourly rate of sixty dollars.

(5) Fee reductions for pollution prevention initiatives. Ecology may reduce registration fees for an individual source if that source demonstrates the use of approved pollution prevention measures or best management practices beyond those required of the source.

(6) Fee reductions for economic hardships. If a small business owner believes the registration fee results in an extreme economic hardship, the small business owner may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. The factors which ecology may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the registration fee through to customers; average annual profits, and cumulative effects of multiple site ownership. In no case will a registration fee be reduced below two hundred dollars.

(7) Fee payments. Fees specified in this section shall be paid within thirty days of receipt of ecology's billing statement. All fees collected under this regulation shall be made payable to the Washington department of ecology. A late fee surcharge of fifty dollars or ten percent of the fee, whichever is more, may be assessed for any fee not received after the thirty-day period.

(8) Dedicated account. All registration fees collected by ecology shall be deposited in the air pollution control account.

(9) Tracking revenues, time, and expenditures. Ecology shall track revenues collected under this subsection on a source-specific basis. Ecology shall track time and expenditures on the basis of ecology budget functions.

[Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-104, filed 11/22/00, effective 12/23/00. Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-104, filed 3/22/95, effective 4/22/95.]

WAC 173-400-105 Records, monitoring, and reporting. The owner or operator of a **source** shall upon notification by the **director** of **ecology**, maintain records on the type and quantity of **emissions** from the **source** and other information deemed necessary to determine whether the **source** is in compliance with applicable **emission limitations** and control measures.

(1) **Emission** inventory. The owner(s) or operator(s) of any **air contaminant source** shall submit an inventory of **emissions** from the **source** each year. The inventory may include **stack** and fugitive **emissions** of **particulate matter**, **PM-10**, sulfur dioxide, carbon monoxide, **total reduced sulfur** compounds (**TRS**), fluorides, lead, VOCs, and other contaminants, and shall be submitted (when required) no later than one hundred five days after the end of the calendar year. The owner(s) or operator(s) shall maintain records of information necessary to substantiate any reported **emissions**, consistent with the averaging times for the applicable standards.

(2) **Monitoring. Ecology** shall conduct a continuous surveillance program to monitor the quality of the ambient atmosphere as to concentrations and movements of **air contaminants**. As a part of this program, the **director** of **ecology** or an authorized representative may require any **source** under the jurisdiction of **ecology** to conduct **stack** and/or **ambient air** monitoring and to report the results to **ecology**.

(3) **Investigation of conditions.** Upon presentation of appropriate credentials, for the purpose of investigating conditions specific to the control, recovery, or release of **air contaminants** into the atmosphere, **personnel** from **ecology** or an **authority** shall have the power to enter at reasonable times upon any private or public property, excepting nonmultiple unit private dwellings housing one or two families.

(4) **Source testing.** To demonstrate compliance, **ecology** or the **authority** may conduct or require that a test be conducted of the **source** using approved **EPA** methods from 40 CFR parts 51, 60, 61 and 63 (in effect on February 20, 2001), or approved procedures contained in *"Source Test Manual - Procedures for Compliance Testing,"* state of Washington, department of **ecology**, as of July 12, 1990, on file at **ecology**. The operator of a **source** may be required to provide the necessary platform and sampling ports for **ecology** personnel or others to perform a test of an **emissions unit**. **Ecology** shall be allowed to obtain a sample from any **emissions unit**. The operator of the **source** shall be given an opportunity to observe the sampling and to obtain a sample at the same time.

(5) **Continuous monitoring and recording.** Owners and operators of the following categories of **sources** shall install, calibrate, maintain and operate equipment for continuously monitoring and recording those **emissions** specified.

(a) Fossil fuel-fired steam generators.

(i) **Opacity**, except where:

(A) Steam generator capacity is less than two hundred fifty million BTU per hour heat input; or

(B) Only gaseous fuel is burned.

(ii) Sulfur dioxide, except where steam generator capacity is less than two hundred fifty million BTU per hour heat input or if sulfur dioxide control equipment is not required.

(iii) Percent oxygen or carbon dioxide where such measurements are necessary for the conversion of sulfur dioxide continuous **emission** monitoring data.

(iv) General exception. These requirements do not apply to a fossil fuel-fired steam generator with an annual average **capacity factor** of less than thirty percent, as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to **ecology** or the **authority** by the owner(s) or operator(s).

(b) **Sulfuric acid plants.** Sulfur dioxide where production capacity is more than three hundred tons per day, expressed as one hundred percent acid, except for those facilities where conversion to sulfuric acid is utilized primarily as a means of preventing **emissions** to the atmosphere of sulfur dioxide or other sulfur compounds.

(c) Fluid bed catalytic cracking units catalyst regenerators at petroleum refineries. **Opacity** where fresh feed capacity is more than twenty thousand barrels per day.

(d) Wood residue fuel-fired steam generators.

(i) **Opacity**, except where steam generator capacity is less than one hundred million BTU per hour heat input.

(ii) Continuous monitoring equipment. The requirements of (e) of this subsection do not apply to wood residue fuel-fired steam generators, but continuous monitoring equipment required by (d) of this subsection shall be subject to approval by **ecology**.

(e) Owners and operators of those **sources** required to install continuous monitoring equipment under this subsection shall demonstrate to **ecology** or the **authority**, compliance with the equipment and performance specifications and observe the reporting requirements contained in 40 CFR Part 51, Appendix P, Sections 3, 4 and 5 (in effect on October 17, 2000).

(f) Special considerations. If for reason of physical plant limitations or extreme economic situations, **ecology** determines that continuous monitoring is not a reasonable requirement, alternative monitoring and reporting procedures will be established on an individual basis. These will generally take the form of **stack** tests conducted at a frequency sufficient to establish the **emission** levels over time and to monitor deviations in these levels.

(g) Exemptions. This subsection (5) does not apply to any **source** which is:

(i) Subject to a **new source performance standard**. These **sources** will be governed by WAC 173-400-115.

(ii) Not subject to an applicable **emission standard**.

(h) Monitoring system malfunctions. A **source** may be temporarily exempted from the monitoring and reporting

requirements of this chapter during periods of monitoring system malfunctions provided that the **source** owner(s) or operator(s) shows to the satisfaction of **ecology** or the **authority** that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

(6) Change in raw materials or fuels for **sources** not subject to requirements of the operating permit program. Any change or series of changes in raw material or fuel which will result in a cumulative increase in **emissions** of sulfur dioxide of forty tons per year or more over that stated in the initial inventory required by subsection (1) of this section shall require the submittal of sufficient information to **ecology** or the **authority** to determine the effect of the increase upon ambient concentrations of sulfur dioxide. **Ecology** or the **authority** may issue **regulatory orders** requiring controls to reduce the effect of such increases. Cumulative changes in raw material or fuel of less than 0.5 percent increase in average annual sulfur content over the initial inventory shall not require such notice.

(7) No **person** shall make any false material statement, representation or certification in any form, notice or report required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit or **order** in force pursuant thereto.

(8) No **person** shall render inaccurate any monitoring device or method required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit, or **order** in force pursuant thereto.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-105, filed 8/15/01, effective 9/15/01. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-105, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-105, filed 9/13/96, effective 10/14/96; 93-18-007 (Order 93-03), § 173-400-105, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-105, filed 2/19/91, effective 3/22/91; 87-20-019 (Order 87-12), § 173-400-105, filed 9/30/87.]

WAC 173-400-107 Excess emissions. (1) The owner or operator of a source shall have the burden of proving to ecology or the authority or the decision-making authority in an enforcement action that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under subsections (4), (5) and (6) of this section.

(2) Excess emissions determined to be unavoidable under the procedures and criteria in this section shall be excused and not subject to penalty.

(3) Excess emissions which represent a potential threat to human health or safety or which the owner or operator of the source believes to be unavoidable shall be reported to ecology or the authority as soon as possible. Other excess emissions shall be reported within thirty days after the end of the month during which the event occurred or as part of the routine emission monitoring reports. Upon request by ecology or the authority, the owner(s) or operator(s) of the source(s) shall submit a full written report including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

(4) Excess emissions due to startup or shutdown conditions shall be considered unavoidable provided the source reports as required under subsection (3) of this section and adequately demonstrates that the excess emissions could not have been prevented through careful planning and design and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

(5) Maintenance. Excess emissions due to scheduled maintenance shall be considered unavoidable if the source reports as required under subsection (3) of this section and adequately demonstrates that the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.

(6) Excess emissions due to upsets shall be considered unavoidable provided the source reports as required under subsection (3) of this section and adequately demonstrates that:

(a) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;

(b) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(c) The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-107, filed 8/20/93, effective 9/20/93.]

WAC 173-400-110 New source review (NSR). (1) **Applicability.** This section, WAC 173-400-112 and 173-400-113 apply statewide except where an **authority** has adopted its own **new source** review rule.

(2) **Projects subject to NSR - notice of construction application.**

(a) A **notice of construction application** must be filed by the owner or operator and an **order of approval** issued by the **permitting agency** prior to the establishment of any **new source**, except for the following:

(i) Those sources exempt under subsection (4) or (5) of this section; and

(ii) A **source** regulated under WAC 173-400-035.

For purposes of this section "establishment" shall mean to begin actual construction, as that term is defined in WAC 173-400-030, and **"new source"** shall include any **modification** to an existing **stationary source**, as defined in WAC 173-400-030.

(b) Regardless of any other subsection of this section, a **notice of construction application** must be filed and an order of approval issued by the **permitting agency** prior to establishment of any of the following **new sources**:

(i) Any project that qualifies as construction, reconstruction or modification of an affected facility, within the mean-

ing of 40 CFR Part 60 **(New Source Performance Standards)**, except Part AAA, Wood stoves (in effect on February 20, 2001);

(ii) Any project that qualifies as a new or modified source within the meaning of 40 CFR 61.02 **(National Emission Standards for Hazardous Air Pollutants)** (in effect on February 20, 2001), except for asbestos demolition and renovation projects subject to 40 CFR 61.145;

(iii) Any project that qualifies as a new source within the meaning of 40 CFR 63.2 **(National Emission Standards for Hazardous Air Pollutants for Source Categories)** (in effect on February 20, 2001);

(iv) Any project that qualifies as a new **major stationary source**, or a **major modification**;

(v) Any **modification** to a **source** that requires an increase either in a plant-wide cap or in a unit specific **emission limit**.

(c) An applicant filing a **notice of construction application** for a project described in WAC 173-400-117(2), Special protection requirements for **Class I areas**, must send a copy of the application to the responsible **federal land manager**.

(3) **Modifications. New source** review of a **modification** shall be limited to the **emission unit** or **units** proposed to be added to an existing **source** or modified and the **air contaminants** whose **emissions** would increase as a result of the **modification**; provided, however, that review of a **major modification** must comply with WAC 173-400-112 and/or 173-400-113, as applicable.

(4) **Emission unit and activity exemptions.**

Except as provided in subsection (2) of this section, establishment of a new **emission unit** that falls within one of the categories listed below is exempt from **new source** review. **Modification** of any **emission unit** listed below is exempt from **new source** review, provided that the modified unit continues to fall within one of the listed categories. The installation or **modification** of a unit exempt under this subsection does not require the filing of a **notice of construction application**.

(a) Maintenance/construction:

(i) Cleaning and sweeping of streets and paved surfaces;

(ii) Concrete application, and installation;

(iii) Dredging wet spoils handling and placement;

(iv) Paving application and maintenance, excluding asphalt plants;

(v) Plant maintenance and upkeep activities (grounds keeping, general repairs, routine house keeping, routine plant painting, welding, cutting, brazing, soldering, plumbing, retarring roofs, etc.);

(vi) Plumbing installation, plumbing protective coating application and maintenance activities;

(vii) Roofing application;

(viii) Insulation application and maintenance, excluding products for resale;

(ix) Janitorial services and consumer use of janitorial products.

(b) Storage tanks:

Note: It can be difficult to determine requirements for storage tanks. **Ecology** strongly recommends that an owner or operator contact the **permitting agency** to determine the exemption status of storage tanks prior to their installation.

(i) Lubricating oil storage tanks except those facilities that are wholesale or retail distributors of lubricating oils;

(ii) Polymer tanks and storage devices and associated pumping and handling equipment, used for solids dewatering and flocculation;

(iii) Storage tanks, reservoirs, pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions;

(iv) Process and white water storage tanks;

(v) Operation, loading and unloading of storage tanks and storage vessels, with lids or other appropriate closure and less than 260 gallon capacity (35 cft);

(vi) Operation, loading and unloading of storage tanks, ≤ 1100 gallon capacity, with lids or other appropriate closure, not for use with materials containing toxic air pollutants, as defined in chapter 173-460 WAC, max. VP 550 mm Hg @21°C;

(vii) Operation, loading and unloading storage of butane, propane, or liquefied petroleum gas with a vessel capacity less than 40,000 gallons;

(viii) Tanks, vessels and pumping equipment, with lids or other appropriate closure for storage or dispensing of aqueous solutions of inorganic salts, bases and acids.

(c) A project with combined aggregate heat inputs of combustion units, ≤ all of the following:

(i) ≤ 500,000 Btu/hr using coal with ≤ 0.5% sulfur or other fuels with ≤ 0.5% sulfur;

(ii) ≤ 500,000 Btu/hr used oil, per the requirements of RCW 70.94.610;

(iii) ≤ 400,000 Btu/hr wood waste or paper;

(iv) < 1,000,000 Btu/hr using kerosene, #1, or #2 fuel oil and with ≤0.05% sulfur;

(v) ≤ 4,000,000 Btu/hr using natural gas, propane, or LPG.

(d) Material handling:

(i) Continuous digester chip feeders;

(ii) Grain elevators not licensed as warehouses or dealers by either the Washington state department of agriculture or the U.S. Department of Agriculture;

(iii) Storage and handling of water based lubricants for metal working where organic content of the lubricant is ≤ 10%;

(iv) Equipment used exclusively to pump, load, unload, or store high boiling point organic material in tanks less than one million gallon, material with initial atmospheric boiling point not less than 150°C or vapor pressure not more than 5 mm Hg @21°C, with lids or other appropriate closure.

(e) Water treatment:

(i) Septic sewer systems, not including active wastewater treatment facilities;

(ii) NPDES permitted ponds and lagoons used solely for the purpose of settling suspended solids and skimming of oil and grease;

(iii) De-aeration (oxygen scavenging) of water where toxic air pollutants as defined in chapter 173-460 WAC are not emitted;

(iv) Process water filtration system and demineralizer vents;

(v) Sewer manholes, junction boxes, sumps and lift stations associated with wastewater treatment systems;

(vi) Demineralizer tanks;

(vii) Alum tanks;

(viii) Clean water condensate tanks.

(f) Environmental chambers and laboratory equipment:

(i) Environmental chambers and humidity chambers not using **toxic air pollutant** gases, as regulated under chapter 173-460 WAC;

(ii) Gas cabinets using only gases that are not toxic air pollutants regulated under chapter 173-460 WAC;

(iii) Installation or **modification** of a single laboratory fume hood;

(iv) Laboratory calibration and maintenance equipment.

(g) Monitoring/quality assurance/testing:

(i) Equipment and instrumentation used for quality control/assurance or inspection purpose;

(ii) Hydraulic and hydrostatic testing equipment;

(iii) Sample gathering, preparation and management;

(iv) Vents from continuous **emission** monitors and other analyzers.

(h) Miscellaneous:

(i) Single-family residences and duplexes;

(ii) Plastic pipe welding;

(iii) Primary agricultural production activities including soil preparation, planting, fertilizing, weed and pest control, and harvesting;

(iv) Comfort air conditioning;

(v) Flares used to indicate danger to the public;

(vi) Natural and forced air vents and **stacks** for bathroom/toilet activities;

(vii) Personal care activities;

(viii) Recreational fireplaces including the use of barbecues, campfires, and ceremonial fires;

(ix) Tobacco smoking rooms and areas;

(x) Noncommercial smokehouses;

(xi) Blacksmith forges for single forges;

(xii) Vehicle maintenance activities, not including vehicle surface coating;

(xiii) Vehicle or equipment washing (see (c) of this subsection for threshold for boilers);

(xiv) Wax application;

(xv) Oxygen, nitrogen, or rare gas extraction and liquefaction equipment not including internal and external combustion equipment;

(xvi) Ozone generators and ozonation equipment;

(xvii) Solar simulators;

(xviii) Ultraviolet curing processes, to the extent that **toxic air pollutant** gases as defined in chapter 173-460 WAC are not emitted;

(xix) Electrical circuit breakers, transformers, or switching equipment installation or operation;

(xx) Pulse capacitors;

(xxi) Pneumatically operated equipment, including tools and hand held applicator equipment for hot melt adhesives;

(xxii) Fire suppression equipment;

(xxiii) Recovery boiler blow-down tank;

(xxiv) Screw press vents;

(xxv) Drop hammers or hydraulic presses for forging or metal working;

(xxvi) Production of foundry sand molds, unheated and using binders less than 0.25% free phenol by sand weight;

(xxvii) Kraft lime mud storage tanks and process vessels;

(xxviii) Lime grits washers, filters and handling;

(xxix) Lime mud filtrate tanks;

(xxx) Lime mud water;

(xxxi) Stock cleaning and pressurized pulp washing down process of the brown stock washer;

(xxxii) Natural gas pressure regulator vents, excluding venting at oil and gas production facilities and transportation marketing facilities;

(xxxiii) Nontoxic air pollutant, as defined in chapter 173-460 WAC, solvent cleaners less than 10 square feet air-vapor interface with solvent vapor pressure not more than 30 mm Hg @21°C;

(xxxiv) Surface coating, aqueous solution or suspension containing ≤ 1% (by weight) VOCs, and/or toxic air pollutants as defined in chapter 173-460 WAC;

(xxxv) Cleaning and stripping activities and equipment using solutions having ≤ 1% VOCs (by weight); on metallic substances, acid solutions are not exempt;

(xxxvi) Dip coating operations, using materials less than 1% VOCs (by weight) and/or toxic air pollutants as defined in chapter 173-460 WAC.

(5) **Exemptions based on emissions thresholds.**

(a) Except as provided in subsection (2) of this section and in this subsection:

(i) A new **emissions unit** that has a **potential to emit** below each of the threshold levels listed in the table contained in (d) of this subsection is exempt from **new source** review provided that the conditions of (b) of this subsection are met.

(ii) A **modification** to an existing **emissions unit** that increases the unit's **actual emissions** by less than each of the threshold levels listed in the table contained in (d) of this subsection is exempt from **new source** review provided that the conditions of (b) of this subsection are met.

(b) The owner or operator seeking to exempt a project from **new source** review under this section shall notify, and upon request, file a brief project summary with the **permitting agency** prior to **beginning actual construction** on the project. If the **permitting agency** determines that the project will have more than a de Minimus impact on air quality, the **permitting agency** may require the filing of a **notice of construction application**. The **permitting agency** may require the owner or operator to demonstrate that the **emissions** increase from the new **emissions unit** is smaller than all of the thresholds listed below.

(c) The owner/operator may **begin actual construction** on the project thirty-one days after the **permitting agency** receives the summary, unless the **permitting agency** notifies the owner/operator within thirty days that the proposed **new source** requires a **notice of construction application**.

(d) Exemption threshold table:

POLLUTANT	THRESHOLD LEVEL (TONS PER YEAR)
(a) **Total Suspended Particulates**	1.25
(b) **PM-10**	0.75
(c) Sulfur Oxides	2.0
(d) Nitrogen Oxides	2.0
(e) **Volatile Organic Compounds,** total	2.0
(f) Carbon Monoxide	5.0
(g) Lead	0.005
(h) **Ozone Depleting Substances** (in effect on July 1, 2000), total	1.0
(i) **Toxic Air Pollutants**	As specified in chapter 173-460 WAC.

(6) **Application processing - completeness determination.**

(a) Within thirty days after receiving a **notice of construction application** or **PSD** permit application, the **permitting agency** shall either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application.

(b) For a project subject to **PSD** review under WAC 173-400-141, a completeness determination includes a determination that the application provides all information required to conduct **PSD** review.

(c) For a project subject to the Special protection requirements for **federal Class I areas** in WAC 173-400-117(2), a completeness determination includes a determination that the application includes all information required for review of that project under WAC 173-400-117(3).

(7) **Final determination.**

(a) Within sixty days of receipt of a complete **notice of construction** or **PSD** permit **application, the permitting agency** shall either issue a final decision on the application or initiate public notice under WAC 173-400-171 on a proposed decision, followed as promptly as possible by a final decision.

(b) A **person** seeking approval to construct or **modify** a **source** that requires an operating permit may elect to integrate review of the operating permit application or amendment required under RCW 70.94.161 and the **notice of construction application** required by this section. A **notice of construction application** designated for integrated review shall be processed in accordance with operating permit program procedures and deadlines in chapter 173-401 WAC. A **PSD** permit application under WAC 173-400-141, a **notice of nonattainment area construction application** for a **major modification** in a **nonattainment area**, or a **notice of construction application** for a **major stationary source** in a **nonattainment area** must also comply with WAC 173-400-171.

(c) Every final determination on a notice of construction application shall be reviewed and signed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the **permitting agency**.

(d) If the **new source** is a **major stationary source** or the change is a **major modification**, the **permitting agency** shall:

(i) Submit any control technology determination included in a final **order of approval** or **PSD** permit to the **RACT/BACT/LAER** clearinghouse maintained by **EPA**; and

(ii) Send a copy of the final **approval order** or **PSD** permit to EPA.

(8) **Appeals.** An **order of approval** or a **PSD** permit, any conditions contained in an **order of approval** or **PSD** permit, or the denial of a **notice of construction application** or **PSD** permit may be appealed to the pollution control hearings board as provided in chapter 43.21B RCW. The **permitting agency** shall promptly mail copies of each **order** approving or denying a **notice of construction application** or **PSD** permit to the applicant and to any other party who submitted timely comments on the application, along with a notice advising parties of their rights of appeal to the pollution control hearings board.

(9) **Construction time limitations.** Approval to construct or modify a **stationary source** becomes invalid if construction is not **commenced** within eighteen months after receipt of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The **permitting agency** may extend the eighteen-month period upon a satisfactory showing that an extension is justified. An extension for a project operating under a **PSD** permit must also comply with public notice requirements in WAC 173-400-171. This provision does not apply to the time period between construction of the approved phases of a phased construction project. Each phase must **commence** construction within eighteen months of the projected and approved commencement date.

(10) **Change of conditions.**

(a) The owner or operator may request, at any time, a change in conditions of an **approval order** or **PSD** permit and the **permitting agency** may approve the request provided the **permitting agency** finds that:

(i) The change in conditions will not cause the **source** to exceed an **emissions standard**;

(ii) No **ambient air quality standard** or **PSD** increment will be exceeded as a result of the change;

(iii) The change will not adversely impact the ability of **ecology** or the **authority** to determine compliance with an **emissions standard**;

(iv) The revised **order** will continue to require **BACT**, as defined at the time of the original approval, for each **new source** approved by the **order** except where the **Federal Clean Air Act** requires **LAER**; and

(v) The revised order meets the requirements of WAC 173-400-110, 173-400-112, 173-400-113 and 173-400-141, as applicable.

(b) Actions taken under this subsection are subject to the public involvement provisions of WAC 173-400-171.

(c) This rule does not prescribe the exact form such requests must take. However, if the request is filed as a **notice of construction application**, that application must be acted upon using the timelines found in subsections (6) and (7) of this section. The fee schedule found in WAC 173-400-116 shall also apply to requests filed as **notice of construction applications**.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-110, filed 8/15/01, effective 9/15/01. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-110, filed 7/21/98, effective 8/21/98. Statutory Authority: RCW 70.94.152. 98-01-183 (Order 96-01), § 173-400-110, filed 12/23/97, effective 1/23/98. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-110, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-110, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-110, filed 4/15/83. Statutory Authority: RCW 70.94.331, 70.94.510, and 70.94.785. 81-03-002 (Order DE 80-53), § 173-400-110, filed 1/8/81. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-110, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-110, filed 5/8/79; Order DE 76-38, § 173-400-110, filed 12/21/76. Formerly WAC 18-04-110.]

WAC 173-400-112 Requirements for new sources in nonattainment areas. (1) **Definitions.** The following definitions apply to this section:

(a) **"Major modification,"** for the purposes of WAC 173-400-112, means any physical change in or change in the method of operation of a **major stationary source** that would result in a **significant net emissions increase** of any pollutant subject to regulation under the **Federal Clean Air Act**.

(i) Any **net emissions increase** that is considered **significant** for **volatile organic compounds** or nitrogen oxides shall be considered **significant** for ozone.

(ii) A physical change or change in the method of operation shall not include:

(A) Routine maintenance, repair and replacement;

(B) Use of an alternative fuel or raw material by reason of an **order** under section 2 (a) and (b) of the 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;

(C) Use of an alternative fuel by reason of an **order** or rule under section 125 of the **Federal Clean Air Act**;

(D) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste; (E) Use of an alternative fuel or raw material by a **source** which:

(I) The **source** was capable of accommodating before December 21, 1976, unless such change would be prohibited under any **federally enforceable** permit or **approval order** condition which was established after December 12, 1976, pursuant to 40 CFR 52.21 or a **SIP** approved **new source** review regulation; or

(II) The **source** is approved to use under any permit or **approval order** issued under WAC 173-400-112;

(iii) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit or **approval order** condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or a **SIP** approved **new source** review regulation.

(iv) Any change in ownership at a **source**.

(v) The addition, replacement, or use of a pollution control project (as defined in 40 CFR 51.165 (a)(1)(xxv), in effect on July 1, 2001) at an existing electric utility steam generating unit, unless the **permitting agency** determines that such addition, replacement, or use renders the unit less environmentally beneficial, or except:

(A) When the **permitting agency** has reason to believe that the pollution control project would result in a **significant net emissions** increase in representative actual annual **emissions** of any **criteria pollutant** over levels used for that **source** in the most recent air quality impact analysis in the area conducted for the purpose of title I of the **Federal Clean Air Act**, if any; and

(B) The **permitting agency** determines that the increase will cause or contribute to a violation of any **National Ambient Air Quality Standard** or **PSD** increment, or visibility limitation.

(vi) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(A) The **SIP**; and

(B) Other requirements necessary to attain and maintain the **National Ambient Air Quality Standard** during the project and after it is terminated.

(b) **"Major stationary source,"** for the purposes of WAC 173-400-112, means:

(i) Any **stationary source** of air pollutants which emits, or has the **potential to emit**, 100 tons per year or more of any pollutant subject to regulation under the **Federal Clean Air Act**, except that lower **emissions** thresholds shall apply as follows:

(A) 70 tons per year of **PM-10** in any "serious" **nonattainment area** for PM-10.

(B) 50 tons per year of carbon monoxide in any "serious" **nonattainment area** for carbon monoxide where **stationary sources** contribute **significantly** to carbon monoxide levels in the area.

(ii) Any physical change that would occur at a **stationary source** not qualifying under (b)(i) of this subsection as a major stationary source, if the change would constitute a major stationary source by itself.

(iii) A major stationary source that is major for **volatile organic compounds** or NOx shall be considered major for ozone.

(iv) The **fugitive emissions** of a **stationary source** shall not be included in determining for any of the purposes of this paragraph whether it is a major stationary source, unless the **source** belongs to one of the following categories of **stationary sources** or the **source** is a major stationary source due to (b)(i)(A) or (b)(i)(B)of this subsection:

(A) Coal cleaning plants (with thermal dryers);

(B) Kraft pulp mills;
(C) Portland cement plants;
(D) Primary zinc smelters;
(E) Iron and steel mills;
(F) Primary aluminum ore reduction plants;
(G) Primary copper smelters;
(H) Municipal incinerators capable of charging more than 50 tons of refuse per day;
(I) Hydrofluoric, sulfuric, or nitric acid plants;
(J) Petroleum refineries;
(K) Lime plants;
(L) Phosphate rock processing plants;
(M) Coke oven batteries;
(N) Sulfur recovery plants;
(O) Carbon black plants (furnace process);
(P) Primary lead smelters;
(Q) Fuel conversion plants;
(R) Sintering plants;
(S) Secondary metal production plants;
(T) Chemical process plants;
(U) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
(V) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
(W) Taconite ore processing plants;
(X) Glass fiber processing plants;
(Y) Charcoal production plants;
(Z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; and
(AA) Any other **stationary source** category which, as of August 7, 1980, is being regulated under section 111 or 112 of the **Federal Clean Air Act**.

(v) For purposes of determining whether a **stationary source** is a major stationary source, the term **"building, structure, facility, or installation"** means all the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual,* as amended.

(c) **"Net emissions increase,"** for the purposes of WAC 173-400-112, means:

(i) The amount by which the sum of the following exceeds zero:

(A) Any increase in **actual emissions** from a particular physical change or change in method of operation at a **source**; and

(B) Any other increases and decreases in **actual emissions** at the **source** that are contemporaneous with the particular change and are otherwise creditable.

(ii) An increase or decrease in **actual emissions** is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs.

(iii) An increase or decrease in **actual emissions** is creditable only if:

(A) It occurred no more than one year prior to the date of submittal of a complete **notice of construction application** for the particular change, or it has been documented by an **emission reduction credit (ERC)**. Any **emissions** increases occurring between the date of issuance of the **ERC** and the date when a particular change becomes operational shall be counted against the **ERC**.

(B) The **permitting agency** has not relied on it in issuing any permit or **order of approval** for the **source** under this section or a previous **SIP** approved **nonattainment area new source** review regulation, which **order** or permit is in effect when the increase in actual emissions from the particular change occurs.

(iv) An increase in **actual emissions** is creditable only to the extent that the new level of **actual emissions** exceeds the old level.

(v) A decrease in **actual emissions** is creditable only to the extent that:

(A) The old level of **actual emissions** or the old level of **allowable emissions**, whichever is lower, exceeds the new level of **actual emissions**;

(B) It is federally enforceable at and after the time that actual construction on the particular change begins;

(C) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(D) The **permitting agency** has not relied on it in issuing any permit or **order of approval** under this section or a **SIP** approved **nonattainment area new source** review regulation; or the **permitting agency** has not relied on it in demonstrating attainment or reasonable further progress.

(vi) An increase that results from a physical change at a **source** occurs when the **emission unit** on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty days.

(d) **"Significant,"** for purposes of WAC 173-400-112, means, in reference to a **net emissions increase** or the **potential** of a **source to emit** any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate	
Carbon monoxide:	100 tons per year (tpy)
Nitrogen oxides:	40 tpy
Sulfur dioxide:	40 tpy
Volatile organic compounds:	40 tpy
Lead:	0.6 tpy
PM-10:	15 tpy

(2) The **permitting agency** that is reviewing an application to establish a **new source** in a **nonattainment area** shall issue the **order of approval** if it determines that the proposed project satisfies each of the following requirements:

(a) The proposed **new source** or **modification** will comply with all applicable **new source performance standards**, **national emission standards for hazardous air pollutants**, **national emission standards for hazardous air pollutants for source categories**, **emission standards** adopted under chapter 70.94 RCW and, for **sources** regulated by an **authority**, the applicable **emission standards** of that **authority**.

(b) The proposed **new source** will employ **BACT** for all **air contaminants**, except that if the **new source** is a **major stationary source** or the proposed **modification** is a **major modification** it will achieve **LAER** for the **air contaminants** for which the area has been designated **nonattainment** and for which the proposed **new source** or **modification** is **major**.

(c) The proposed **new source** will not cause any **ambient air quality standard** to be exceeded, will not violate the requirements for reasonable further progress established by the **SIP** and will comply with WAC 173-400-113 (2)(c) for all **air contaminants** for which the area has not been designated **nonattainment**.

(d) If the proposed **new source** is a **major stationary source** or the proposed **modification** is a **major modification**, the **permitting agency** has determined, based on review of an analysis performed by the **source** of alternative sites, sizes, production processes, and environmental control techniques, that the benefits of the project significantly outweigh the environmental and social costs imposed as a result of its location, construction, or **modification**.

(e) If the proposed **new source** or the proposed **modification** is **major** for the **air contaminant** for which the area is designated **nonattainment**, **allowable emissions** from the proposed **new source** or **modification** of that **air contaminant** are offset by reductions in **actual emissions** from existing **sources** in the **nonattainment** area. **Emission** offsets must be sufficient to ensure that total **allowable emissions** from existing **major stationary sources** in the **nonattainment area**, **new** or **modified sources** which are not **major stationary sources**, and the proposed **new** or **modified source** will be less than total **actual emissions** from existing **sources** (before submitting the application) so as to represent (when considered together with the nonattainment provisions of section 172 of the **Federal Clean Air Act**) reasonable further progress. All offsetting **emission** reductions must satisfy the following requirements:

(i) The proposed new level of **allowable emissions** of the source or **emissions unit(s)** providing the reduction must be less than the current level of **actual emissions** of that **source** or **emissions unit(s)**. No emission reduction can be credited for **actual emissions** which exceed the current **allowable emissions** of the **source** or **emissions unit(s)** providing the reduction. **Emission** reductions imposed by local, state, or federal regulations, regulatory orders, or permits required by the **Federal Clean Air Act**, including the **SIP**, cannot be credited.

(ii) The **emission** reductions must provide for a net air quality benefit. For marginal ozone **nonattainment areas**, the total **emissions** of **volatile organic compounds** or total **emissions** of nitrogen oxides are reduced by a ratio of 1.1 to 1 for the area in which the **new source** is located. For any other **nonattainment area**, the **emissions** offsets must provide a positive net air quality benefit in the **nonattainment area**. Determinations on whether **emissions** offsets provide a positive net air quality benefit will be made in accordance with the guidelines contained in 40 CFR 51 Appendix S (in effect on July 1, 2000).

(iii) If the offsets are provided by another **source**, the reductions in **emissions** from that **source** must be federally enforceable by the time the **order of approval** for the **new** or **modified source** is effective. An **emission reduction credit** issued under WAC 173-400-131 may be used to satisfy some or all of the offset requirements of this subsection.

(f) If the proposed **new source** is a **major stationary source** or the proposed **modification** is a **major modification**, the owner or operator has demonstrated that all **major stationary sources** owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in Washington are subject to **emission limitations** and are in compliance, or on a schedule for compliance, with all applicable **emission limitations** and **standards** under the **Federal Clean Air Act**, including all rules in the **SIP**.

(g) If the proposed **new source** is a **major stationary source** within the meaning of WAC 173-400-113(1), or the proposed **modification** is a **major modification** within the meaning of WAC 173-400-113(1), it meets the requirements of the **PSD** program in WAC 173-400-141 for all **air contaminants** for which the area has not been designated **nonattainment**.

(h) If the proposed **new source** or **modification** will emit any **toxic air pollutants** regulated under chapter 173-460 WAC, the **source** meets all applicable requirements of that chapter.

(i) If the proposed **new source** is a **major stationary source** within the meaning of WAC 173-400-113(1), or the proposed **modification** is a **major modification** within the meaning of WAC 173-400-113(1), the project meets the Special protection requirements for **federal Class I areas** in WAC 173-400-117.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-112, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-112, filed 8/20/93, effective 9/20/93.]

WAC 173-400-113 Requirements for new sources in attainment or unclassifiable areas. (1) **Definitions.** The following definitions apply to this section:

(a) **"Major modification"** for purposes of WAC 173-400-113, means any physical change in or change in the method of operation of a **major stationary source** that would result in a **significant net emissions increase** of any pollutant subject to regulation under the **Federal Clean Air Act**.

(i) Any **net emissions increase** that is considered **significant** for **volatile organic compounds** or nitrogen oxides shall be considered **significant** for ozone.

(ii) A physical change or change in the method of operation shall not include:

(A) Routine maintenance, repair and replacement;

(B) Use of an alternative fuel or raw material by reason of an **order** under section 2 (a) and (b) of the 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;

(C) Use of an alternative fuel by reason of an order or rule section 125 of the **Federal Clean Air Act**;

(D) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(E) Use of an alternative fuel or raw material by a **source** which:

(I) The **source** was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition or **approval order** which was established after January 6, 1975, pursuant to 40 CFR 52.21 or a **SIP** approved **new source** review regulation; or

(II) The **source** is approved to use under any **PSD** permit;

(F) An increase in the hours of operation or in the production rate, unless such change is prohibited under any **federally enforceable** permit condition or an **approval order** which was established after January 6, 1975, pursuant to 40 CFR 52.21 or a **SIP** approved **new source** review regulation.

(G) Any change in ownership at a **source**.

(H) The addition, replacement, or use of a pollution control project at an existing electric utility steam generating unit, unless the **permitting agency** determines that such addition, replacement, or use renders the unit less environmentally beneficial, or except:

(I) When the **permitting agency** has reason to believe that the pollution control project (as defined in 40 CFR 51.166, in effect on July 1, 2001) would result in a **significant net emissions increase** in representative **actual** annual **emissions** of any **criteria pollutant** over levels used for that **source** in the most recent air quality impact analysis in the area conducted for the purpose of title I of the **Federal Clean Air Act**, if any; and

(II) The **permitting agency** determines that the increase will cause or contribute to a violation of any **National Ambient Air Quality Standard** or **PSD** increment, or visibility limitation.

(I) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with the **SIP**, and other requirements necessary to attain and maintain the **National Ambient Air Quality Standard** during the project and after it is terminated.

(b) **"Major stationary source,"** for purposes of WAC 173-400-113, means:

(i) Any of the following **stationary sources** of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the **Federal Clean Air Act**:

(A) Fossil fuel-fired steam electric plants of more than 50 million British thermal units per hour heat input;

(B) Coal cleaning plants (with thermal dryers);

(C) Kraft pulp mills;

(D) Portland cement plants;

(E) Primary zinc smelters;

(F) Iron and steel mill plants;

(G) Primary aluminum ore reduction plants;

(H) Primary copper smelters;

(I) Municipal **incinerators** capable of charging more than 50 tons of refuse per day;

(J) Hydrofluoric, sulfuric, and nitric acid plants;

(K) Petroleum refineries;

(L) Lime plants;

(M) Phosphate rock processing plants;

(N) Coke oven batteries;

(O) Sulfur recovery plants;

(P) Carbon black plants (furnace process);

(Q) Primary lead smelters;

(R) Fuel conversion plants;

(S) Sintering plants;

(T) Secondary metal production plants;

(U) Chemical process plants;

(V) Fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input;

(W) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(X) Taconite ore processing plants;

(Y) Glass fiber processing plants; and

(Z) Charcoal production plants.

(ii) Regardless of the **stationary source** size specified in (b)(i) of this subsection, any **stationary source** which emits, or has the **potential to emit**, 250 tons per year or more of any air pollutant subject to regulation under the **Federal Clean Air Act**; or

(iii) Any physical change that would occur at a **stationary source** not otherwise qualifying under (b)(i) or (ii) of this subsection, as a major stationary source if the change would constitute a major stationary source by itself.

(iv) A major stationary source that is major for **volatile organic compounds** or NOx shall be considered major for ozone.

(v) The **fugitive emissions** of a **stationary source** shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs to one of the following categories of **stationary sources**:

(A) Coal cleaning plants (with thermal dryers);

(B) Kraft pulp mills;

(C) Portland cement plants;

(D) Primary zinc smelters;

(E) Iron and steel mills;

(F) Primary aluminum ore reduction plants;

(G) Primary copper smelters;

(H) Municipal incinerators capable of charging more than 50 tons of refuse per day;
(I) Hydrofluoric, sulfuric, or nitric acid plants;
(J) Petroleum refineries;
(K) Lime plants;
(L) Phosphate rock processing plants;
(M) Coke oven batteries;
(N) Sulfur recovery plants;
(O) Carbon black plants (furnace process);
(P) Primary lead smelters;
(Q) Fuel conversion plants;
(R) Sintering plants;
(S) Secondary metal production plants;
(T) Chemical process plants;
(U) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
(V) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
(W) Taconite ore processing plants;
(X) Glass fiber processing plants;
(Y) Charcoal production plants;
(Z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
(AA) Any other **stationary source** category which, as of August 7, 1980, is being regulated under section 111 or 112 of the **Federal Clean Air Act**.

(vi) For purposes of determining whether a **stationary source** is a major stationary source, the term **"building, structure, facility, or installation"** means all the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual, 1972,* as amended.

(c) **"Net emissions increase"** for purposes of WAC 173-400-113, means:

(i) The amount by which the sum of the following exceeds zero:

(A) Any increase in **actual emissions** from a particular physical change or change in the method of operation at a **source**; and

(B) Any other increases and decreases in **actual emissions** at the **source** that are contemporaneous with the particular change and are otherwise creditable.

(ii) An increase or decrease in **actual emissions** is contemporaneous with the increase from the particular change only if it occurs within five years before the date that the increase from the particular change occurs.

(iii) An increase or decrease in actual emissions is creditable only if **ecology** or **EPA** has not relied on it in issuing a **PSD** permit for the **source**, which permit is in effect when the increase in **actual emissions** from the particular change occurs.

(iv) An increase or decrease in **actual emissions** of sulfur dioxide, particulate matter, or nitrogen oxides, which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available. With respect to **particulate matter**, only **PM-10 emissions** can be used to evaluate the net emissions increase for **PM-10**.

(v) An increase in **actual emissions** is creditable only to the extent that the new level of **actual emissions** exceeds the old level.

(vi) A decrease in **actual emissions** is creditable only to the extent that:

(A) The old level of **actual emissions** or the old level of **allowable emissions**, whichever is lower, exceeds the new level of **actual emissions**;

(B) It is **federally enforceable** at and after the time that actual construction on the particular change begins; and

(C) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(vii) An increase that results from a physical change at a source occurs when the **emissions unit** on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty days.

(d) **"Significant,"** for purposes of WAC 173-400-113, means:

(i) In reference to a **net emissions increase** or the **potential** of a **source to emit** any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate	
Carbon monoxide:	100 tons per year (tpy)
Nitrogen oxides:	40 tpy
Sulfur dioxide:	40 tpy
Particulate matter (PM):	25 tpy of **PM emissions** 15 tpy of **PM-10 emissions**
Volatile organic compounds:	40 tpy
Fluorides:	3 tpy
Lead:	0.6 tpy
Sulfuric acid mist:	7 tpy
Hydrogen sulfide (H_2S):	10 tpy
Total reduced sulfur (including H_2S):	10 tpy
Reduced sulfur compounds (including H_2S):	10 tpy
Municipal waste combustor organics: (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.2 grams per year (0.112 oz. per year or 49 grains per year)
Municipal waste combustor metals: (measured as particulate matter)	14 megagrams per year (15 tpy)

Municipal waste combustor acid gases: (measured as sulfur dioxide and hydrogen chloride)	36 megagrams per year (40 tpy)
Municipal solid waste landfill emissions: (measured as nonmethane organic compounds)	45 megagrams per year (50 tpy)
Ozone-depleting substances (in effect on July 1, 2000):	100 tpy

(ii) In reference to a **net emissions increase** or the potential of a **source** to emit a pollutant subject to regulation under the **Federal Clean Air Act** that the definition in (d)(i) of this subsection does not list, any emissions rate. However, for purposes of the applicability of this section, the hazardous air pollutants listed under section 112(b) of the **Federal Clean Air Act**, including the hazardous air pollutants that may have been added to the list, are not considered subject to regulation.

(iii) Regardless of the definition in (d)(i) of this subsection, significant means any emissions rate or any **net emissions increase** associated with a **major stationary source** or **major modification** which would construct within 10 kilometers of a **Class I area**, and have an impact on such area equal to or greater than 1 microgram per cubic meter (twenty-four-hour average).

(2) The **permitting agency** that is reviewing an application to establish a **new source** or **modification** in an **attainment** or **unclassifiable area** shall issue an **order of approval** if it determines that the proposed project satisfies each of the following requirements:

(a) The proposed **new source** or **modification** will comply with all applicable **new source performance standards, national emission standards for hazardous air pollutants, national emission standards for hazardous air pollutants for source categories, emission standards** adopted under chapter 70.94 RCW and, for **sources** regulated by an **authority**, the applicable **emission standards** of that **authority**.

(b) The proposed **new source** or **modification** will employ **BACT** for all pollutants not previously emitted or whose **emissions** would increase as a result of the **new source** or **modification**.

(c) **Allowable emissions** from the proposed **new source** or **modification** will not delay the **attainment** date for an area not in **attainment** nor cause or contribute to a violation of any **ambient air quality standard**. This requirement will be considered to be met if the projected impact of the **allowable emissions** from the proposed **new source** or the projected impact of the increase in **allowable emissions** from the proposed **modification** at any location within a **nonattainment area** does not exceed the following levels for the pollutants for which the area has been designated **nonattainment**:

Pollutant	Annual Average	24-Hour Average	8-Hour Average	3-Hour Average	1-Hour Average
CO-	-		0.5 mg/m^3	-	2 mg/m^3
SO_2	1.0 µg/m^3	5 µg/m^3	-	25 µg/m^3	30 µg/m^3
PM_{10}	1.0 µg/m^3	5 µg/m^3	-	-	-
NO_2	1.0 µg/m^3	-	-	-	-

An offsetting emission reduction may be used to satisfy some or all of the requirements of this subsection.

(d) If the proposed **new source** is a **major stationary source** or the proposed **modification** is a **major modification**, it meets all applicable requirements of WAC 173-400-141.

(e) If the proposed **new source** or the proposed **modification** will emit any **toxic air pollutants** regulated under chapter 173-460 WAC, the source meets all applicable requirements of that program.

(f) If the proposed **new source** is a **major stationary source** or the proposed **modification** is a **major modification**, the project meets the Special protection requirements for **federal Class I areas** of WAC 173-400-117.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-113, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-113, filed 8/20/93, effective 9/20/93.]

WAC 173-400-114 Requirements for replacement or substantial alteration of emission control technology at an existing stationary source. (1) Any **person** proposing to replace or substantially alter the **emission** control technology installed on an existing **stationary source** or **emission unit** shall file a **notice of construction application** with the appropriate **authority**, or with **ecology** in areas or for **sources** over which **ecology** has jurisdiction. Replacement or substantial alteration of control technology does not include routine maintenance, repair or similar parts replacement.

(2) For projects not otherwise reviewable under WAC 173-400-110, **ecology** or the **authority** may:

(a) Require that the owner or operator employ **RACT** for the affected **emission unit**;

(b) Prescribe reasonable operation and maintenance conditions for the control equipment; and

(c) Prescribe other requirements as authorized by chapter 70.94 RCW.

(3) Within thirty days of receipt of a **notice of construction application** under this section **ecology** or the **authority** shall either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application. Within thirty days of receipt of a complete **notice of construction application** under this section **ecology** or the **authority** shall either issue an **order of approval** or a proposed **RACT** determination for the proposed project.

(4) Construction shall not **"commence,"** as defined in WAC 173-400-030, on a project subject to review under this section until **ecology** or the **authority** issues a final **order of approval**. However, any **notice of construction application** filed under this section shall be deemed to be approved without conditions if **ecology** or the **authority** takes no action within thirty days of receipt of a complete **notice of construction application**.

(5) Approval to replace or substantially alter **emission** control technology shall become invalid if construction is not **commenced** within eighteen months after receipt of such approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. **Ecology** or the **authority** may extend the eighteen-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen months of the projected and approved commencement date.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-114, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-114, filed 8/20/93, effective 9/20/93.]

WAC 173-400-115 Standards of performance for new sources. NSPS. Standards of performance for new sources are called **New Source Performance Standards**, or **NSPS**.

(1) **Adoption by reference.**

(a) 40 CFR Part 60 and Appendices in effect on February 20, 2001, is adopted by reference. Exceptions are listed in subsection (1)(d) of this section.

(b) 40 CFR Part 60, subpart AAAA (new small municipal waste combustion units) in effect on June 6, 2001, is adopted by reference.

(c) 40 CFR Part 60, subpart CCCC (commercial and industrial solid waste incineration units) in effect on June 1, 2001, is adopted by reference.

The following list is provided for informational purposes:

Subpart A	General Provisions, except 40 CFR 60.5 and 60.6
Subpart D	Fossil fuel fired steam generators for which construction commenced after August 17, 1971, and prior to September 19, 1978, which have a heat input greater than 73 megawatts but not greater than 350 megawatts
Subpart Da	Electric utility steam generating units for which construction commenced after September 18, 1978, which have a heat input greater than 73 megawatts but not greater than 350 megawatts
Subpart Db	Industrial-commercial-institutional steam generating units for which construction commenced after June 19, 1984, and prior to June 19, 1986, which have a heat input greater than 29 megawatts but less than 73 megawatts
Subpart Dc	Small industrial-commercial-institutional steam generating units
Subpart E	Incinerators
Subpart Ea	Municipal waste combustors
Subpart Eb	Large municipal waste combustors constructed after September 20, 1964, or modified or reconstructed after June 19, 1964
Subpart Ec	Hospital/Medical/Infectious Waste Incinerators Constructed after June 20, 1996
Subpart F	Portland cement plants
Subpart G	Nitric acid plants
Subpart H	Sulfuric acid plants
Subpart I	Asphalt concrete plants
Subpart J	Petroleum refineries which produce less than 25,000 barrels per day of refined products
Subpart K	Storage vessels for petroleum liquid constructed after June 11, 1973, and prior to May 19, 1978, which have a capacity greater than 40,000 gallons
Subpart Ka	Storage vessels for petroleum liquids constructed after May 18, 1978, which have a capacity greater than 40,000 gallons
Subpart Kb	Volatile organic liquid storage vessels (including petroleum liquid storage vessels) constructed, reconstructed, or modified after July 23, 1984
Subpart L	Secondary lead smelters
Subpart M	Brass and bronze ingot production plants
Subpart N	Iron and steel plants
Subpart Na	Secondary emissions from basic oxygen process steel making facilities
Subpart O	Sewage treatment plants
Subpart P	Primary copper smelters
Subpart Q	Primary zinc smelters
Subpart R	Primary lead smelters
Subpart S	Primary aluminum reduction plants
Subpart T	Phosphate fertilizer industry: Wet process phosphoric acid plants
Subpart U	Phosphate fertilizer industry: Superphosphoric acid plants
Subpart V	Phosphate fertilizer industry: Diammonium phosphate plants
Subpart W	Phosphate fertilizer industry: Triple superphosphate plants
Subpart X	Phosphate fertilizer industry: Granular triple superphosphate storage facilities
Subpart Y	Coal preparation plants
Subpart Z	Ferroalloy production facilities
Subpart AA	Steel plants: Electric arc furnaces
Subpart AAa	Steel plants: Electric arc furnaces and argon-oxygen decarburization vessels
Subpart BB	Kraft pulp mills
Subpart CC	Glass manufacturing plants
Subpart DD	Grain elevators
Subpart EE	Industrial surface coating: Metal furniture
Subpart GG	Stationary gas turbines
Subpart HH	Lime manufacturing plants
Subpart KK	Lead-acid battery plants
Subpart LL	Metallic mineral processing plants
Subpart MM	Automobile and light duty truck surface coating operations
Subpart NN	Phosphate rock plants
Subpart PP	Ammonium sulfate manufacture

Subpart QQ	Publication rotogravure printing
Subpart RR	Pressure sensitive tape and label surface coating operations
Subpart SS	Industrial surface coating: Large appliances
Subpart TT	Industrial surface coating: Metal coils
Subpart UU	Asphalt processing and asphalt roofing manufacture
Subpart VV	SOCMI equipment leaks (VOC)
Subpart WW	Beverage can surface coating operations
Subpart XX	Bulk gasoline terminals
Subpart AAA	New residential wood heaters
Subpart BBB	Rubber tire manufacturing industry
Subpart DDD	VOC emissions from the polymer manufacturing industry
Subpart FFF	Flexible vinyl and urethane coating and printing
Subpart GGG	Petroleum refineries - compressors and fugitive emission sources
Subpart HHH	Synthetic fiber production facilities
Subpart III	VOC emissions from SOCMI air oxidation unit processes
Subpart JJJ	Petroleum dry cleaners
Subpart KKK	Equipment leaks of VOC from onshore natural gas processing plants
Subpart LLL	Onshore natural gas processing; SO_2 emissions
Subpart NNN	VOC emissions from SOCMI distillation operations
Subpart OOO	Nonmetallic mineral processing plants
Subpart PPP	Wool fiberglass insulation manufacturing plants
Subpart QQQ	VOC emissions from petroleum refinery wastewater emissions
Subpart RRR	VOC emissions from synthetic organic chemical manufacturing industry
Subpart SSS	Magnetic tape coating facilities
Subpart TTT	Industrial surface coating: Surface coating of plastic parts for business machines
Subpart UUU	Calciners and dryers in mineral industries
Subpart VVV	Polymeric coating of supporting substrates facilities
Subpart WWW	Municipal Solid Waste Landfills constructed, reconstructed or modified on or after May 30, 1991 (See WAC 173-400-070(9) for rules regulating MSW landfills constructed or modified before May 30, 1991.)
Subpart AAAA	Small municipal waste combustion units constructed after August 30, 1999, or modified or reconstructed after June 6, 2001 (See WAC 173-400-050(5) for rules regulating small municipal waste combustion units constructed on or before August 30, 1999.)
Subpart CCCC	Commercial and industrial solid waste incinerators constructed after November 30, 1999; or modified or reconstructed on or after June 1, 2001 (See WAC 173-400-050(4) for rules regulating commercial and industrial solid waste incinerators constructed on or before November 30, 1999.)
Appendix A	Test Methods
Appendix B	Performance Specifications
Appendix C	Determination of Emission Rate Change
Appendix D	Required Emission Inventory Information
Appendix F	Quality Assurance Procedures
Appendix I	Removable Label and Owner's Manual

(d) Exceptions to adopting 40 CFR Part 60 by reference.

(i) The term "administrator" in 40 CFR Part 60 includes the **permitting agency**.

(ii) The following sections and subparts of 40 CFR Part 60 are not adopted by reference:

(A) 40 CFR 60.5 (determination of construction or modification);

(B) 40 CFR 60.6 (review of plans); and

(C) 40 CFR Part 60, subparts C, Cb, Cc, Cd, and Ce (emission guidelines).

(iii) Effective June 6, 2001, 40 CFR 60.17 (subpart A) is amended by revising paragraphs (h)(1), (h)(2), and (h)(3) to read as follows:

(h)(1) ASME QRO-1-1994, Standard for the Qualification and Certification of Resource Recovery Facility Operators approved for Section 60.56a, 60.54b(a), 60.54b(b), 60.1185(a), 60.1185 (c)(2), 60.1675(a), and 60.1675 (c)(2).

(h)(2) ASME PTC 4.1-1964 (Reaffirmed 1991), Power Test Codes: Test Code for Steam Generating Units (with 1968 and 1969 Addenda), IBR approved for Section 60.46b, 60.58a (h)(6)(ii), 60.58b (i)(6)(ii), 60.1320 (a)(3) and 60.1810 (a)(3).

(h)(3) ASME interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th Edition (1971), IBR approved for Section 60.58a (h)(6)(ii), 60.58b (i)(6)(ii), 60.1320 (a)(4) and 60.1810 (a)(4).

(2) Note that under RCW 80.50.020(14), larger energy facilities subject to subparts D, Da, GG, J, K, Kb, Y, KKK, LLL, and QQQ are regulated by the energy facility site evaluation council (EFSEC) under WAC 463-39-115.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-115, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-115, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW 70.94.785. 98-22-019 (Order 98-02), § 173-400-115, filed 10/23/98, effective 11/23/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-115, filed 9/13/96, effective 10/14/96; 93-05-044 (Order 92-34), § 173-400-115, filed 2/17/93, effective 3/20/93; 91-05-064 (Order 90-06), § 173-400-115, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-115, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-115, filed 4/15/83; 82-16-019 (Order DE 82-20), § 173-400-115, filed 7/27/82. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-115, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-115, filed 5/8/79; Order DE 76-38, § 173-400-115, filed 12/21/76. Formerly WAC 18-04-115.]

WAC 173-400-116 New source review fees. (1) **Applicability.** Every **person** required to submit a **notice of construction application** to the department of **ecology** as authorized in RCW 70.94.152 for establishment of any proposed **new source** or **emissions unit(s)** shall pay fees as set forth in subsections (2) and (3) of this section. **Persons** required to submit a **notice of construction application** to a local air **authority** may be required to pay a fee to **ecology** to cover the costs of review pursuant to WAC 173-400-141, second tier analysis pursuant to WAC 173-460-090, and risk management decisions pursuant to WAC 173-460-100 as set forth in subsection (3) of this section. Fees assessed under this section shall apply without regard to whether an **order of approval** is issued or denied.

(2) **Basic review fees.** All owners or operators of proposed new sources are required to pay a basic review fee. The basic review fee covers the costs associated with preapplication assistance, completeness determination, **BACT** determination, technical review, public involvement and **approval/denial orders**. Complexity determination shall be based on the project described in the **notice of construction application**. Basic review fees are shown below:

(a) Low complexity **new source** or **emission unit** (**emissions** of individual **criteria pollutants** are all less than one-half of the levels established in the definition of **"significant"** in WAC 173-400-112 and/or 173-400-113, as applicable, or **emissions** of individual **toxic air pollutants** are all less than 2.0 tons/year) - one thousand dollars;

(b) Moderate complexity **new source** or **emission unit** (**emissions** of one or more individual **criteria pollutants** are greater than one-half of the levels established in the definition of **"significant"** in WAC 173-400-112 and/or 173-400-113, as applicable, or **emissions** of one or more **toxic air pollutants** are greater than 2.0 tons/year and less than ten tons/year) - five thousand dollars; or

(c) High complexity **new source** or **emissions unit** (**emissions** of one or more **criteria pollutants** are greater than the levels established in the definition of **"significant"** in WAC 173-400-112 and/or 173-400-113, as applicable, or **emissions** of one or more **toxic air pollutants** are greater than ten tons/year) - fifteen thousand dollars.

(d) Exceptions. The following fees for **new source** review shall be charged instead of the applicable fees listed in (a) through (c) of this subsection and in subsection (3) of this section:

(i)	Dry cleaners	$200
(ii)	Gasoline stations	$200
(iii)	Storage tanks	
(A)	< 20,000 gallons	$200
(B)	20,000 - 100,000 gallons	$500
(C)	> 100,000	$700
(iv)	Chromic acid plating and anodizing identified in WAC 173-460-060	$200
(v)	Solvent metal cleaners identified in WAC 173-460-060	$200
(vi)	Abrasive blasting identified in WAC 173-460-060	$200
(vii)	New **emission units** or activities that qualify as insignificant emission units under WAC 173-401-530 whether located at a chapter 401 source or nonchapter 401 source	$200

(e) Additional units. An owner or operator proposing to build more than one identical **emission unit** shall be charged a fee for the additional units equal to one-third the basic review fee of the first unit.

(3) **Additional charges.** In addition to those fees required under subsection (2)(a) through (c) of this section, the following fees will be required as applicable:

(a) **Prevention of significant deterioration** review (includes **ecology** review of local air **authority sources**) - ten thousand dollars;

(b) Establishing **LAER** and offset requirements for a **major stationary source** or **major modification** proposing to locate in a **nonattainment area** - ten thousand dollars;

(c) Tier II toxics review as required under WAC 173-460-090 - seven thousand five hundred dollars;

(d) Tier III review as required under WAC 173-460-100 - five thousand dollars;

(e) State Environmental Policy Act review (where ecology is the lead agency):

(i) Determination of nonsignificance (DNS) and environmental checklist review - two hundred dollars; or

(ii) Environmental impact statement (EIS) review - two thousand dollars;

(iii) Where more than one **ecology** program is charging a fee for reviewing or preparing SEPA documents, **ecology** will not charge a SEPA review fee as part of the **new source** review fees;

(f) Case-by-case MACT determinations required for a **new source** or **modification** under Section 112(g) or Section 112(j) of the **FCAA** - five thousand dollars.

(4) **Small business fee reduction.** The **new source** review fee identified in subsections (2) and (3) of this section may be reduced for a small business.

(a) To qualify for the small business **new source** review fee reduction, a business must meet the requirements of "small business" as defined in RCW 19.85.020. In RCW 19.85.020, "small business" means any business entity, including a sole proprietorship, corporation, partnership, or other legal entity, that is owned and operated independently from all other businesses, that has the purpose of making a profit, and that has fifty or fewer employees.

(b) To receive a fee reduction, the owner or operator of a small business must include information in the application demonstrating that the conditions of (a) of this subsection have been met. The application must be signed:

(i) By an authorized corporate officer in the case of a corporation;

(ii) By an authorized partner in the case of a limited or general partnership; or

(iii) By the proprietor in the case of a sole proprietorship.

(c) **Ecology** may verify the application information and if the owner or operator has made false statements, deny the

fee reduction request and revoke previously granted fee reductions.

(d) For small businesses determined to be eligible under (a) of this subsection, the new source review fee shall be reduced to the greater of:

(i) Fifty percent of the **new source** review fee; or

(ii) Two hundred fifty dollars.

(e) If due to special economic circumstances, the fee reduction determined under (d) of this subsection imposes an extreme hardship on a small business, the small business may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. The factors which **ecology** may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the **new source** review fees through to customers; and average annual profits. In no case will a new source review fee be reduced below one hundred dollars.

(5) Fee reductions for pollution prevention initiatives. **Ecology** may reduce the fees defined in subsections (2) and (3) of this section where the owner or operator of the proposed **source** demonstrates that approved pollution prevention measures will be used.

(6) Fee payments. Fees specified in subsections (2) through (5) of this section shall be paid at the time a **notice of construction application** is submitted to the department. A **notice of construction application** is considered incomplete until **ecology** has received the appropriate **new source** review payment. Additional charges assessed pursuant to subsection (3) of this section shall be due thirty days after receipt of an **ecology** billing statement. All fees collected under this regulation shall be made payable to the Washington department of **ecology**.

(7) Dedicated account. All **new source** review fees collected by the department from permit program **sources** shall be deposited in the air operating permit account created under RCW 70.94.015. All **new source** review fees collected by the department from nonpermit program **sources** shall be deposited in the air pollution control account.

(8) Tracking revenues, time, and expenditures. **Ecology** shall track revenues collected under this subsection on a source-specific basis. Ecology shall track time and expenditures on the basis of complexity categories.

(9) Periodic review. **Ecology** shall review and, as appropriate, update this section at least once every two years.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-116, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-116, filed 9/13/96, effective 10/14/96. Statutory Authority: RCW 70.94.153 and 70.94.154. 94-17-070, § 173-400-116, filed 8/15/94, effective 9/15/94.]

WAC 173-400-117 Special protection requirements for federal Class I areas. (1) **Definitions.** The following definition applies to this section:

"Adverse impact on visibility" means **visibility impairment** that 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 impairment, 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.

(2) **Applicability.** The requirements of this section apply to all of the following **sources**:

(a) A **source** that is submitting a **PSD** permit application for a new **major stationary source** or a **major modification**; or

(b) A **source** in a **nonattainment area** that is submitting a **notice of construction application** for a **major stationary source** or a **major modification**, as either of those terms are defined in WAC 173-400-113, Requirements for **new sources** in **attainment** or **unclassifiable areas**.

(3) **Contents and distribution of application.**

(a) The application shall include an analysis of the anticipated impacts of the project on visibility in any **federal Class I area**.

(b) The applicant must mail a copy of the application for the project and all amendments to the application to the **permitting agency, EPA** and to the responsible **federal land manager**. **Ecology** will provide a list of the names and addresses of the **federal land manager**.

(4) **Notice to federal land manager.**

(a) The **permitting agency** shall send a copy of the completeness determination to the responsible **federal land manager**.

(b) If, prior to receiving a **notice of construction application** or a **PSD** permit application, the **permitting agency** receives notice of a project described in subsection (2) of this section that may affect visibility in a **federal Class I area**, the **permitting agency** shall notify the responsible **federal land manager** within thirty days of the notification.

(5) **Analysis by federal land manager.**

(a) The **permitting agency** will consider any demonstration presented by the responsible **federal land manager** that **emissions** from a proposed **new source** or the **net emissions increase** from a proposed modification described in subsection (2) of this section would have an **adverse impact on visibility** in any **federal Class I area**, provided that the demonstration is received by the **permitting agency** within thirty days of the **federal land manager's** receipt of the complete application.

(b) If the **permitting agency** concurs with the **federal land manager's** demonstration, the permit or **approval order** for the project either shall be denied, or conditions shall be included in the permit or **approval order** to prevent the adverse impact.

(c) If the **permitting agency** finds that the **federal land manager's** analysis does not demonstrate that the project will have an **adverse impact on visibility** in a **federal Class I area**, the **permitting agency** either shall explain its decision

in the public notice required by WAC 173-400-171(2), or, in the case of public notice of proposed action on a **PSD** permit application, state that an explanation of the decision appears in the Fact Sheet for the proposed permit.

(6) **Additional requirements for projects that require a PSD permit.**

(a) For sources impacting **federal Class I areas**, the **permitting agency** shall provide notice to **EPA** of every action related to consideration of the **PSD** permit.

(b) The **permitting agency** shall consider any demonstration received from the responsible **federal land manager** prior to the close of the public comment period on a proposed **PSD** permit that emissions from the proposed **new source** or the **net emissions increase** from a proposed **modification** would have an adverse impact on the air quality-related values (including visibility) of any **mandatory Class I federal area**.

(c) If the **permitting agency** concurs with the demonstration, the permit either shall be denied, or conditions shall be included in the permit to prevent the adverse impact.

(7) **Additional requirements for projects located in nonattainment areas.** In reviewing a **PSD** permit application or **notice of construction application** for a project proposed for construction in an area classified as **nonattainment**, the **permitting agency** must ensure that the **source's emissions** will be consistent with making reasonable progress toward meeting the national goal of preventing any future, and remedying any existing, **impairment** of **visibility** by human-caused air pollution in **mandatory Class I federal areas**. In determining the need for **approval order** conditions to meet this requirement, the **permitting agency** may take into account the costs of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source.

(8) **Monitoring.** The **permitting agency** may require post-construction monitoring of the impact from the project. The monitoring shall be limited to the impacts on visibility in any **federal Class I area** near the proposed project.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-117, filed 8/15/01, effective 9/15/01.]

WAC 173-400-118 Designation of Class I, II, and III areas. (1) **Designation.**

(a) Lands within the exterior boundaries of Indian reservations may be redesignated only by the appropriate Indian governing body. This restriction does not apply to nontrust lands within the 1873 Survey Area of the Puyallup Indian Reservation.

(b) All areas of the state must be designated either **Class I**, II or III.

(i) The following areas are the **Class I areas** in Washington state:

(A) Alpine Lakes Wilderness;

(B) Glacier Peak Wilderness;

(C) Goat Rocks Wilderness;

(D) Adams Wilderness;

(E) Mount Rainier National Park;

(F) North Cascades National Park;

(G) Olympic National Park;

(H) Pasayten Wilderness; and

(I) Spokane Indian Reservation.[1]

(ii) All other areas of the state are Class II, but may be redesignated as provided in subsections (2) and (3) of this section.

1. EPA redesignated this land based on a request from the Spokane Tribal Council. See 40 CFR 52.2497 and 56 FR 14862, April 12, 1991, for details.

(2) **Restrictions on area classifications.**

(a) Except for the Spokane Indian Reservation, the **Class I areas** listed in subsection (1) of this section may not be redesignated.

(b) Except as provided in (a) of this subsection, the following areas that exceed 10,000 acres in size may be redesignated as **Class I** or II:

(i) Areas in existence on August 7, 1977:

(A) A national monument;

(B) A national primitive area;

(C) A national preserve;

(D) A national wild and scenic river;

(E) A national wildlife refuge; or

(F) A national lakeshore or seashore.

(ii) Areas established after August 7, 1977:

(A) A national park; or

(B) A national wilderness area.

(3) **Redesignation of area classifications.**

(a) **Ecology** shall propose the redesignation of an area classification as a revision to the **SIP**.

(b) **Ecology** may submit to **EPA** a proposal to redesignate areas of the state as **Class I** or II if:

(i) **Ecology** followed the public involvement procedures in WAC 173-400-171;

(ii) **Ecology** explained the reasons for the proposed redesignation, including a description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation;

(iii) **Ecology** made available for public inspection at least thirty days before the hearing the explanation of the reasons for the proposed redesignation;

(iv) **Ecology** notified other states, tribal governing bodies, and **federal land managers** whose lands may be affected by the proposed redesignation at least thirty days prior to the public hearing;

(v) **Ecology** consulted with the elected leadership of local governments in the area covered by the proposed redesignation before proposing the redesignation; and

(vi) **Ecology** followed these procedures when a redesignation includes any federal lands:

(A) **Ecology** notified in writing the appropriate **federal land manager** on the proposed redesignation. **Ecology** allowed forty-five days for the **federal land manager** to confer with **ecology** and to submit written comments.

(B) **Ecology** responded to any written comments from the **federal land manager** that were received within forty-

five days of notification. **Ecology's** response was available to the public in advance of the notice of the hearing.

(I) **Ecology** sent the written comments of the **federal land manager**, along with **ecology's** response to those comments, to the public location as required in WAC 173-400-171 (2)(a).

(II) If **ecology** disagreed with the **federal land manager's** written comments, **ecology** published a list of any inconsistency between the redesignation and the comments of the **federal land manager**, together with the reasons for making the redesignation against the recommendation of the **federal land manager**.

(c) **Ecology** may submit to **EPA** a proposal to redesignate any area other than an area to which subsection (1) of this section applies as Class III if:

(i) The redesignation followed the public involvement requirements of WAC 173-400-171 and 173-400-118(3);

(ii) The redesignation has been specifically approved by the governor of Washington state, after consultation with the appropriate committees of the legislature if it is in session, or with the leadership of the legislature, if it is not in session;

(iii) The redesignation has been approved by local governments representing a majority of the residents of the area to be redesignated. The local governments enacted legislation or passed resolutions concurring in the redesignation;

(iv) The redesignation would not cause, or contribute to, a concentration of any **air contaminant** which would exceed any maximum allowable increase permitted under the classification of any other area or any **National Ambient Air Quality Standard**; and

(v) A **PSD** permit under WAC 173-400-141 for a new **major stationary source** or **major modification** could be issued only if the area in question were redesignated as Class III, and material submitted as part of that application was available for public inspection prior to any public hearing on redesignation of the area as Class III.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-118, filed 8/15/01, effective 9/15/01.]

WAC 173-400-120 Bubble rules. (1) Applicability. The owner(s) or operator(s) of any source(s) may apply for a bubble for any contaminant regulated by state or federal law for which the emission requirement may be stated as an allowable limit in weight of contaminant per unit time for the emissions units involved.

(2) Conditions. A bubble may be authorized provided the following conditions have been demonstrated to the satisfaction of ecology or the authority.

(a) The contaminants exchanged must be of the same type, that is, PM_{10} for PM_{10}, sulfur dioxide for sulfur dioxide, etc.

(b) The bubble will not interfere with the attainment and maintenance of air quality standards. No bubble shall be authorized in a nonattainment area unless there is an EPA-approved SIP which demonstrates attainment for that area.

(c) The bubble will not result in a delay in compliance by any source, nor a delay in any existing enforcement action.

(d) The bubble will not supersede NSPS, NESHAPS, BACT, or LAER. The emissions of hazardous contaminants shall not be increased.

(e) The bubble will not result in an increase in the sum of actual emission rates of the contaminant involved from the emissions units involved.

(f) A bubble may not be authorized only for opacity limits. However, if the emission limit for particulates for a given emissions unit is increased as part of a bubble, the opacity limit for the given emissions unit may be increased subject to the following limitations:

(i) The new opacity limit shall be specific for the given emissions unit;

(ii) The new opacity limit shall be consistent with the new particulates limit;

(iii) An opacity greater than sixty percent shall never be authorized;

(iv) If the given emissions unit emits or has the potential to emit one hundred tons per year or more of particulate matter, the opacity shall be monitored continuously.

(g) The emission limits of the bubble are equivalent to existing limits in enforceability.

(h) Concurrent with or prior to the authorization of a bubble, each emission unit involved in a bubble shall receive or have received a regulatory order or permit that establishes total allowable emissions from the source of the contaminant being bubbled, expressed as weight of the contaminant per unit time.

(i) There will be no net adverse impact upon air quality from the establishment of new emission requirements for a specific source or emissions unit. Determination of net adverse impact shall include but not be limited to public perception of opacity and public perception of odorous contaminants.

(j) Specific situations may require additional demonstration as requested by ecology or the authority.

(3) Jurisdiction. Whenever a bubble application involves emissions units, some of which are under the jurisdiction of an authority, approval will require concurrence by both authorities. The new emission limits for each emissions unit will be enforced by the authority of original jurisdiction.

(4) Additional information. Within thirty days, after the receipt of a bubble application and all supporting data and documentation, ecology or the authority may require the submission of additional information needed to review the application.

(5) Approval. Within thirty days after all the required information has been received, ecology or the authority shall approve or deny the application, based on a finding that conditions in subsection (2)(a) through (j) of this section have been satisfied or not. If the application is approved, a regulatory order or equivalent document shall be issued which includes new allowable emissions limits expressed in weight of pollutant per unit time for each emissions unit affected by the bubble. The regulatory order or equivalent document shall include any conditions required to assure that subsection (2)(a) through (j) of this section will be satisfied. If the bubble depends in whole or in part upon the shutdown of equipment, the regulatory order or equivalent document must prohibit operation of the affected equipment.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-120, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-120, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 89-02-055 (Order 88-39), § 173-400-120, filed 1/3/89; 83-09-036 (Order DE 83-13), § 173-400-120, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-120, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-120, filed 5/8/79; Order DE 76-38, § 173-400-120, filed 12/21/76. Formerly WAC 18-04-120.]

WAC 173-400-131 Issuance of emission reduction credits. (1) **Applicability.** The owner or operator of any **source** may apply to the **permitting agency** for an **emission reduction credit (ERC)** if the **source** proposes to reduce its **actual emissions** rate for any contaminant regulated by state or federal law for which the **emission** requirement may be stated as an allowable limit in weight of contaminant per unit time for the **emissions units** involved.

(2) **Time of application.** The application for an **ERC** must be made prior to or within one hundred eighty days after the **emission** reduction has been accomplished.

(3) **Conditions.** An **ERC** may be authorized provided the following conditions have been demonstrated to the satisfaction of the **permitting agency**.

(a) The quantity of **emissions** in the **ERC** shall be less than or equal to the old **allowable emissions** rate or the old **actual emissions** rate, whichever is the lesser, minus the new **allowable emissions** rate.

(b) The **ERC** application must include a description of all the changes that are required to accomplish the claimed **emissions** reduction, such as, new control equipment, process modifications, limitation of hours of operation, permanent shutdown of equipment, specified control practices, etc.

(c) The **ERC** must be large enough to be readily quantifiable relative to the **source** strength of the **emissions unit(s)** involved.

(d) No part of the **emission** reductions claimed for credit shall have been used as part of a determination of **net emission increase**, nor as part of an offsetting transaction under WAC 173-400-112 (2)(d), nor as part of a **bubble** transaction under WAC 173-400-120, nor to satisfy **NSPS, NESHAPS, for Source Categories, BACT**, or **LAER**.

(e) Concurrent with or prior to the authorization of an **ERC**, the applicant shall receive (have received) a **regulatory order** or permit that establishes total **allowable emissions** from the **source** or **emissions unit** of the contaminant for which the **ERC** is requested, expressed as weight of contaminant per unit time.

(f) The use of any **ERC** shall be consistent with all other federal, state, and local requirements of the program in which it is used.

(4) **Additional information.** Within thirty days after the receipt of an **ERC** application and all supporting data and documentation, the **permitting agency** may require the submission of additional information needed to review the application.

(5) **Approval.** Within thirty days after all required information has been received, the **permitting agency** shall approve or deny the application, based on a finding that conditions in subsection (3)(a) through (e) of this section have been satisfied or not. If the application is approved, the **permitting agency** shall:

(a) Issue a **regulatory order** or equivalent document to assure that the **emissions** from the **source** will not exceed the allowable **emission** rates claimed in the ERC application, expressed in weight of pollutant per unit time for each **emission unit** involved. The **regulatory order** or equivalent document shall include any conditions required to assure that subsection (3)(a) through (e) of this section will be satisfied. If the **ERC** depends in whole or in part upon the shutdown of equipment, the **regulatory order** or equivalent document must prohibit operation of the affected equipment; and

(b) Issue a certificate of **emission reduction credit**. The certificate shall specify the issue date, the contaminants involved, the **emission** decrease expressed as weight of pollutant per unit time, the **nonattainment area** involved, if applicable, and the **person** to whom the certificate is issued.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-131, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-131, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-131, filed 2/19/91, effective 3/22/91.]

WAC 173-400-136 Use of emission reduction credits (ERC). (1) **Permissible use.** An **ERC** may be used to satisfy the requirements for authorization of a **bubble** under WAC 173-400-120; as a part of a determination of **"net emissions increase;"** or as an offsetting reduction to satisfy the requirements for **new source** review in WAC 173-400-112 or 173-400-113 (2)(c).

(2) **Surrender of ERC certificate.** When an **ERC** is used under subsection (1) of this section, the certificate for the **ERC** must be surrendered to the **permitting agency**. If only a portion of the **ERC** is used, the amended certificate will be returned to the owner.

(3) **Conditions of use.**

(a) An **ERC** may be used only for the **air contaminants** for which it was issued.

(b) The **permitting agency** may impose additional conditions of use to account for temporal and spatial differences between the **emissions units** that generated the **ERC** and the **emissions units** that use the **ERC**.

(4) **Sale of an ERC.** An **ERC** may be sold or otherwise transferred to a person other than the person to whom it was originally issued. Within thirty days after the transfer of ownership, the certificate must be surrendered to the issuing **authority**. After receiving the certificate, the issuing **authority** shall reissue the certificate to the new owner.

(5) **Redemption period.** An unused **ERC** expires ten years after date of original issue.

(6) **Discount due to change in SIP.** If reductions in emissions beyond those identified in the **SIP** are required to meet an **ambient air quality standard**, if the standard cannot be met through controls on operating sources, and if the plan must be revised, an **ERC** may be discounted by **ecology**

or the **authority** after public involvement according to WAC 173-400-171. This discount shall not exceed the percentage of additional emission reduction needed to reach attainment.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-136, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-136, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-136, filed 2/19/91, effective 3/22/91.]

WAC 173-400-141 Prevention of significant deterioration (PSD). (1) The **prevention of significant deterioration** or **PSD** program is a construction permitting program for new **major stationary sources** and **major modifications** to existing **major stationary sources** located in areas in **attainment** or in areas that are **unclassifiable** for any **criteria air pollutant**. No **major stationary source** or **major modification** to which the requirements of this section apply shall **begin actual construction** without a **PSD** permit.

(2) **Early planning encouraged.** In order to develop an appropriate application, the **source** should engage in an early planning process to assess the needs of the facility. An opportunity for a preapplication meeting with **ecology** is available when **ecology** is the **permitting agency**.

(3) **Application.**

(a) The **PSD** application is a form of a **notice of construction application** and the **PSD** permit is a form of an **approval order**.

(b) The applicant shall provide complete copies of its **PSD** application, distributed in the following manner:

(i) Three copies shall be sent to the **permitting agency**. If **ecology** is the **permitting agency**, copies must be sent to the Air Quality Program at P.O. Box 47600, Olympia, WA 98504-7600.

(ii) One copy shall be sent to each of the following **federal land managers**:

(A) U.S. Department of the Interior - National Park Service; and

(B) U.S. Department of Agriculture - U.S. Forest Service.

(iii) If the local **authority** is not the **permitting agency** and the project lies within the territory of a local **authority**, one copy shall be sent to the **authority** in whose territory the **source** is located.

(iv) One copy shall be sent to **EPA**.

(c) **Ecology** shall provide the names and addresses of the **federal land managers**.

(4) **Enforcement.**

Ecology or the **permitting agency** with authority over the source under chapter 173-401 WAC, the Operating permit regulation, shall receive all required reports and enforce the conditions in the **PSD** permit.

(5) **Applicable requirements.**

A **PSD** permit must comply with the following requirements:

(a) WAC 173-400-110 - **New source** review;

(b) WAC 173-400-113 - Requirements for **new sources** in **attainment** or **unclassifiable areas**;

(c) WAC 173-400-117 - Special protection requirements for **federal Class I areas**;

(d) WAC 173-400-171 - Public involvement; and

(e) The following subparts of 40 CFR 52.21, in effect on July 1, 2000, which are adopted by reference. Exceptions are listed in (5)(e)(i), (ii), (iii), and (iv):

40 CFR 52.21 (b)	Definitions.
40 CFR 52.21 (c)	Ambient air increments.
40 CFR 52.21 (d)	Ambient air ceilings.
40 CFR 52.21 (h)	Stack heights.
40 CFR 52.21 (i)	Review of major stationary sources and major modifications - source applicability and exemptions.
40 CFR 52.21 (j)	Control technology review.
40 CFR 52.21 (k)	Source impact analysis.
40 CFR 52.21 (l)	Air quality models.
40 CFR 52.21 (m)	Air quality analysis.
40 CFR 52.21 (n)	Source information.
40 CFR 52.21 (o) (1) and (2)	Additional impact analysis.
40 CFR 52.21 (r)	Source obligation.
40 CFR 52.21 (v)	Innovative control technology.
40 CFR 52.21 (w)	Permit rescission.

(i) Exception to adopting 40 CFR 52.21 by reference. Every use of the word "administrator" in 40 CFR 52.21 means **ecology** or the **authority** except for the following:

(A) In 40 CFR 52.21 (b)(17), the definition of federally enforceable, "administrator" means the **EPA** administrator.

(B) In 40 CFR 52.21 (l)(2), air quality models, "administrator" means the **EPA** administrator.

(ii) Exception to adopting 40 CFR 52.21 by reference. The following definitions apply to this section instead of the definitions in 40 CFR 52.21(b):

(A) **Major modification** as defined in WAC 173-400-113;

(B) **Major stationary source** as defined in WAC 173-400-113;

(C) **Net emissions increase** as defined in WAC 173-400-113;

(D) **Significant** as defined in WAC 173-400-113; and

(E) **Volatile organic compound** as defined WAC 173-400-030.

(iii) Exception to adopting 40 CFR 52.21 by reference. The following definition of "secondary emissions" applies to this section instead of the definition in 40 CFR 52.21 (b)(18): **"Secondary emissions"** means **emissions** which would occur as a result of the construction or operation of a **major stationary source** or **major modification**, but do not come from the **major stationary source** or **major modification** itself. For the purpose of this section, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification

which causes the secondary emissions. Secondary emissions may include, but are not limited to:

(A) **Emissions** from ships or trains located at the new or modified **stationary source**; and

(B) **Emissions** from any off-site support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the **major stationary source** or **major modification**.

(iv) Exception to adopting 40 CFR 52.21 by reference. Each reference in 40 CFR 52.21(i) to "paragraphs (j) through (r) of this section" is amended to state "paragraphs (j) through (n) of this section, paragraphs (o)(1) and (o)(2) of this section, paragraph (r) of this section, WAC 173-400-117 and 173-400-171."

(6) **Notifying EPA.** The **permitting agency** shall provide notice to **EPA** of every action related to consideration of the permit.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-141, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-141, filed 9/13/96, effective 10/14/96; 93-18-007 (Order 93-03), § 173-400-141, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-141, filed 2/19/91, effective 3/22/91.]

WAC 173-400-151 Retrofit requirements for visibility protection. (1) The requirements of this section apply to an **existing stationary facility**. An **"existing stationary facility"** means a **stationary source** of **air contaminants** that meets all of these conditions:

(a) The **stationary source** must have the potential to emit 250 tons per year or more of any **air contaminant**. **Fugitive emissions**, to the extent quantifiable, must be counted in determining the **potential to emit**; and

(b) The **stationary source** was not in operation prior to August 7, 1962, and was in existence on August 7, 1977.

(c) For purposes of determining whether a **stationary source** is an existing stationary facility, the term "building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same major group (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual, 1972,* as amended.

(2) Ecology shall identify each **existing stationary facility** which may reasonably be anticipated to cause or contribute to **visibility impairment** in any **mandatory Class 1 federal area** in Washington and any adjacent state.

(3) For each **existing stationary facility** identified under subsection (2) of this section, the **permitting agency** shall determine **BART** for the **air contaminant** of concern and any additional air pollution control technologies that are to be required to reduce impairment from the **existing stationary facility**.

(4) Each **existing stationary facility** shall apply **BART** as new technology for control of the **air contaminant** becomes reasonably available if:

(a) The **existing stationary facility** emits the **air contaminant** contributing to **visibility impairment**;

(b) Controls representing **BART** for that **air contaminant** have not previously been required under this section; and

(c) The **impairment of visibility** in any **mandatory Class 1 federal area** is **reasonably attributable** to the emissions of the air contaminant.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-151, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-151, filed 2/19/91, effective 3/22/91.]

WAC 173-400-161 Compliance schedules. (1) **Issuance.** Whenever a source is found to be in violation of an emission standard or other provision of this chapter, ecology or the authority may issue a regulatory order requiring that the source be brought into compliance within a specified time. The order shall contain a schedule for installation, with intermediate benchmark dates and a final completion date, and shall constitute a compliance schedule. Requirements for public involvement (WAC 173-400-171) must be met.

(2) **Federal action.** A source shall be considered to be in compliance with this chapter if all the provisions of its individual compliance schedule included with a regulatory order are being met. Such compliance does not preclude federal enforcement action by the EPA until and unless the schedule is submitted and adopted as an amendment to the state implementation plan.

(3) **Penalties for delayed compliance.** Sources on a compliance schedule but not meeting emissions standards may be subject to penalties as provided in the Federal Clean Air Act.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-161, filed 2/19/91, effective 3/22/91.]

WAC 173-400-171 Public involvement. (1) **Applicability.**

(a) **Ecology** or the **authority** must provide public notice before approving or denying any of the following types of applications or other actions:

(i) **Notice of construction application** for any **new** or **modified source** or **emissions unit**, if a **significant net increase** in **emissions** of any **air pollutant** regulated by state or federal law would result; or

(ii) Any preliminary determination to approve or disapprove a **PSD** permit application, except an administrative amendment to an existing permit; or

(iii) An extension of the deadline to begin construction in a **PSD** permit; or

(iv) Any use of a modified or substituted air quality model, other than a guideline model in Appendix W of 40 CFR Part 51 (in effect on July 1, 2000) as part of review under WAC 173-400-112, 173-400-141, or 173-400-117; or

(v) Any **order** to determine **RACT**; or

(vi) An **order** to establish a compliance schedule or a variance; or

(vii) An **order** to demonstrate the creditable height of a stack which exceeds the **GEP** formula height and sixty-five meters, by means of a fluid model or a field study, for the purposes of establishing an **emission limitation**; or

(viii) An **order** to authorize a **bubble**; or

(ix) **Notice of construction application** or **regulatory order** used to establish a **creditable emission reduction**;

(x) An **order** issued under WAC 173-400-091 that establishes limitations on a **source's potential to emit**; or

(xi) Any application or other proposed action made under this chapter in which **ecology** or the **authority** determines there is substantial public interest.

(b) Ecology must provide notice on the following actions:

(i) A Washington state recommendation that will be submitted by the **director** of **ecology** to **EPA** for approval of a **SIP** revision, including plans for attainment, maintenance, and visibility protection; or

(ii) A Washington state recommendation to **EPA** for designation or redesignation of an area as **attainment**, **nonattainment**, or **unclassifiable**; or

(iii) A Washington state recommendation to **EPA** for a change of boundaries of an **attainment** or **nonattainment** area; or

(iv) A Washington state recommendation to **EPA** for redesignation of an area under WAC 173-400-118.

(c) A **notice of construction application** designated for integrated review with an application to issue or modify an operating permit shall be processed in accordance with the operating permit program procedures and deadlines. A project designated for integrated review that includes a **PSD** permit application, a **notice of construction application** for a **major modification** in a **nonattainment area**, or a **notice of construction application** for a **major stationary source** in a **nonattainment area** must also comply with public notice requirements in WAC 173-400-171.

(2) **Public notice.** Public notice shall be made only after all information required by **ecology** or the **authority** has been submitted and after applicable preliminary determinations, if any, have been made. The applicant or other initiator of the action must pay the cost of providing public notice. Public notice shall include:

(a) Availability for public inspection. The information submitted by the applicant, and any applicable preliminary determinations, including analyses of the effects on air quality, must be available for public inspection in at least one location near the proposed project. Exemptions from this requirement include information protected from disclosure under any applicable law, including, but not limited to, RCW 70.94.205.

(i) For **PSD** permit determinations, **ecology** must include a copy or summary of other materials considered in making the preliminary determination.

(ii) For a redesignation of a class area under WAC 173-400-118, **ecology** must make available for public inspection at least thirty days before the hearing the explanation of the reasons for the proposed redesignation.

(iii) For a revision of the **SIP** subject to subsection (1)(b)(iii) of this section, **ecology** must make available for public inspection the information related to the action at least thirty days before the hearing.

(b) Newspaper publication. Public notice of the proposed project must be published in a newspaper of general circulation in the area of the proposed project and must include:

(i) The name and address of the owner or operator and the facility;

(ii) A brief description of the proposal;

(iii) The location of the documents made available for public inspection;

(iv) A thirty-day period for submitting written comment to **ecology** or the **authority**;

(v) A statement that a public hearing may be held if **ecology** or the **authority** determines within a thirty-day period that significant public interest exists.

(vi) The length of the public comment period in the event of a public hearing;

(vii) For projects subject to Special protection requirements for federal Class I areas in WAC 173-400-117 (5)(c), public notice shall either explain the **permitting agency's** decision or state that an explanation of the decision appears in the Fact Sheet for the proposed **PSD** permit; and

(viii) For a redesignation of an area under WAC 173-400-118, public notice shall state that an explanation of the reasons for the proposed redesignation is available for review at the public location.

(c) Notifying EPA. A copy of the public notice will be sent to the **EPA** Region 10 regional administrator.

(d) Additional public notice requirements for **PSD** projects. For projects subject to the **PSD** program in WAC 173-400-141, the **permitting agency** shall meet the public notice requirements in subsection (2)(a), (b), and (c) of this section, WAC 173-400-117(6), and the following requirements:

(i) **PSD** Permit Fact Sheet. All **PSD** permit preliminary determinations and final permits will be accompanied by a fact sheet that includes the following information:

(A) A brief description of the type of facility or activity subject to permitting;

(B) The type and quantity of pollutants proposed to be emitted into the air;

(C) A brief summary of the BACT options considered and the reasons why the selected BACT level of control was selected;

(D) A brief summary of the basis for permit conditions;

(E) The degree of increment consumption expected to result from operation of the facility at the permitted levels;

(F) An analysis of the impacts on air quality related values in **federal Class I** areas affected by the project; and

(G) An analysis of the impacts of the proposed **emissions** on visibility following the requirements in WAC 173-400-117.

(ii) For **PSD** permit preliminary determinations, the public notice required by subsection (2)(b) of this section shall contain:

(A) The name and address of the applicant;

(B) The location of the proposed project;

(C) A brief description of the project proposal;

(D) The preliminary determination to approve or disapprove the application;

(E) How much increment is expected to be consumed by this project;

(F) The name, address, and telephone number of the person to contact for further information;

(G) A brief explanation of how to comment on the project; and

(H) An explanation on how to request a public hearing.

(iii) For **PSD** permit preliminary determinations, a copy of the public notice required by subsection (2)(b) of this section shall be sent to:

(A) The applicant;

(B) U.S. Department of the Interior - National Park Service;

(C) U.S. Department of Agriculture - Forest Service;

(D) **EPA** Region 10;

(E) Any tribal governing body whose lands may be affected by **emissions** from the project;

(F) The chief executive of the city where the project is located;

(G) The chief executive of the county where the project is located;

(H) The **authority** in whose territory the project is located;

(I) The comprehensive regional land use planning agency whose lands may be affected by **emissions** from the project;

(J) Individuals or organizations that requested notification of the specific project proposal;

(K) Other individuals who requested notification of **PSD** permits;

(L) Any state within 100 km of the proposed project; and

(M) The location for public inspection of material required under subsection (2)(a) of this section.

(iv) A copy of the **PSD** permit preliminary determination and the fact sheet must be sent to:

(A) The applicant;

(B) U.S. Department of the Interior - National Park Service;

(C) U.S. Department of Agriculture - Forest Service;

(D) **EPA** Region 10;

(E) The **authority** in whose territory the project is located;

(F) Individuals or organizations who request a copy; and

(G) The location for public inspection of material required under subsection (2)(a) of this section.

(v) The final **PSD** permit determination shall include the following:

(A) A copy of the final **PSD** permit or the determination to deny the permit;

(B) A summary of the comments received;

(C) The **permitting agency's** response to those comments;

(D) A description of what approval conditions changed from the preliminary determination; and

(E) A cover letter that includes an explanation of how the final determination may be appealed.

(vi) The **permitting agency** shall mail a copy of the cover letter that accompanies the final **PSD** permit determination to:

(A) The applicant;

(B) U.S. Department of the Interior - National Park Service;

(C) U.S. Department of Agriculture - Forest Service;

(D) **EPA** Region 10;

(E) Any tribal governing body whose lands may be affected by **emissions** from project;

(F) The chief executive of the city where the project is located;

(G) The chief executive of the county where the project is located;

(H) The **authority** in whose territory the project is located;

(I) The comprehensive regional land use planning agency whose lands may be affected by **emissions** from the project;

(J) Individuals or organizations that requested notification of the specific project proposal;

(K) Other individuals who requested notification of **PSD** permits;

(L) Any state within 100 km of the proposed project; and

(M) The location for public inspection of material required under subsection (2)(a) of this section.

(vii) The **permitting agency** shall mail a copy of the final **PSD** permit determination to:

(A) The applicant;

(B) U.S. Department of the Interior - National Park Service;

(C) U.S. Department of Agriculture - Forest Service;

(D) **EPA** Region 10;

(E) The **authority** in whose territory the project is located;

(F) Individuals or organizations who request a copy; and

(G) The location for public inspection of material required under subsection (2)(a) of this section.

(e) Additional public notice requirements for a **SIP** revision. For a revision to the **SIP** that is submitted by the **director** of **ecology**, **ecology** must publish the public notice required by subsection (2)(b) of this section in the *Washington State Register* in advance of the date of the public hearing.

(3) **Public comment.**

(a) The public comment period must be at least the thirty-day period for written comment specified in the public notice.

(b) If a public hearing is held, the public comment period must extend through the hearing date

(c) **Ecology** or the **authority** shall make no final decision on any application or action of any type described in subsection (1) of this section until the public comment period has ended and any comments received during the public comment period have been considered.

(4) **Public hearings.**

(a) The applicant, any interested governmental entity, any group, or any person may request a public hearing within the thirty-day public comment period. A request must indicate the interest of the entity filing it and why a hearing is warranted. **Ecology** or the **authority** may hold a public hearing if it determines significant public interest exists. **Ecology** or the **authority** will determine the location, date, and time of the public hearing.

(b) **Ecology** must hold a hearing on the following actions:

(i) A Washington state recommendation to **EPA** that will be submitted by the **director** of **ecology** for approval of a **SIP** revision;

(ii) A Washington state recommendation to **EPA** for a change of boundaries of an **attainment** or **nonattainment** area;

(iii) A Washington state recommendation to **EPA** for designation of an area as **attainment, nonattainment,** or **unclassifiable**; and

(iv) A Washington state recommendation to **EPA** to redesignate an area under WAC 173-400-118.

(c) **Ecology** must provide at least thirty days prior notice of a hearing required under subsection (4)(b) of this section.

(5) **Other requirements of law.** Whenever procedures permitted or mandated by law will accomplish the objectives of public notice and opportunity for comment, those procedures may be used in lieu of the provisions of this section. This subsection does not apply to a **PSD** permit application, a **notice of construction application** for a **major modification**, a **notice of construction application** for a **major stationary source**, and any action in WAC 173-400-171 (1)(b).

(6) **Public information.** All information, except information protected from disclosure under any applicable law, including, but not limited to, RCW 70.94.205, is available for public inspection at the issuing agency. This includes copies of **notices of construction applications**, **orders**, and **modifications**.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-171, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-171, filed 3/22/95, effective 4/22/95; 93-18-007 (Order 93-03), § 173-400-171, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-171, filed 2/19/91, effective 3/22/91.]

WAC 173-400-180 Variance. Any person who owns or is in control of a plant, building, structure, establishment, process, or equipment may apply to ecology for a variance from provisions of this chapter governing the quality, nature, duration, or extent of discharges of air contaminants in accordance with the provisions of RCW 70.94.181.

(1) **Jurisdiction.** Sources in any area over which a local air pollution control authority has jurisdiction shall make application to that authority rather than ecology. Variances to state rules shall require ecology's approval prior to being issued by an authority. Ecology or the authority may grant such variance, but only after public involvement per WAC 173-400-171.

(2) **Full faith and credit.** Variances granted in compliance with state and federal laws by an authority for sources under their jurisdiction will be accepted as variances to this regulation.

(3) **EPA concurrence.** No variance or renewal shall be construed to set aside or delay any requirements of the Federal Clean Air Act except with the approval and written concurrence of the USEPA.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-180, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-180, filed 2/19/91, effective 3/22/91.]

WAC 173-400-190 Requirements for nonattainment areas. The development of specific requirements for nonattainment areas shall include consultation with local government in the area and shall include public involvement per WAC 173-400-171.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-190, filed 2/19/91, effective 3/22/91.]

WAC 173-400-200 Creditable stack height and dispersion techniques. (1) Applicability. These provisions shall apply to all sources except:

(a) Stacks for which construction had commenced on or before December 31, 1970, except where pollutants are being emitted from such stacks used by sources which were constructed, or reconstructed, or for which major modifications were carried out after December 31, 1970;

(b) Coal-fired steam electric generating units subject to the provisions of Section 118 of the Federal Clean Air Act, which commenced operation before July 1, 1957, and for whose stacks construction commenced before February 8, 1974;

(c) Flares;

(d) Open burning for agricultural or silvicultural purposes as covered under the smoke management plan;

(e) Residential wood combustion and open burning for which episodic restrictions apply.

These provisions shall not be construed to limit the actual stack height.

(2) Prohibitions. No source may use dispersion techniques or excess stack height to meet ambient air quality standards or PSD increment limitations.

(a) Excess stack height. Excess stack height is that portion of a stack which exceeds the greater of:

(i) Sixty-five meters, measured from the ground level elevation at the base of the stack; or

(ii) $H_g = H + 1.5L$

where: H_g = "good engineering practice" (GEP) stack height, measured from the ground level elevation at the base of the stack,

H = height of nearby structure(s) measured from the ground level elevation at the base of the stack,

L = lesser dimension, height or projected width, of nearby structure(s), subject to the proviso below.

"Nearby," as used in this subsection for purposes of applying the GEP formula means that distance up to five

times the lesser of the height or the width dimension of a structure, but not greater than 0.8 kilometer (1/2 mile).

(b) Dispersion techniques. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise. This does not include:

(i) The reheating of a gas stream, following the use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;

(ii) The merging of gas streams where:

(A) The source was originally designed and constructed with such merged gas streams, as demonstrated by the source owner(s) or operator(s).

(B) Such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion shall apply only to the emission limitation for the pollutant affected by such change in operation.

(C) Before July 8, 1985, such merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons, and not primarily motivated by an intent to gain emissions credit for greater dispersion.

(3) Exception. EPA, ecology, or an authority may require the use of a field study or fluid model to verify the creditable stack height for the source. This also applies to a source seeking credit after the effective date of this rule for an increase in existing stack height up to that established by the GEP formula. A fluid model or field study shall be performed according to the procedures described in the EPA Guideline for Determination of Good Engineering Practice Height (Technical Support Document of the Stack Height Regulations). The creditable height demonstrated by a fluid model or field study shall ensure that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

(a) "Nearby," as used in this subsection for conducting a field study or fluid model, means not greater than 0.8 km, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to ten times the maximum height of the feature, not to exceed two miles if such feature achieves a height 0.8 km from the stack that is at least forty percent of the GEP stack height or twenty-six meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

(b) "Excessive concentration" is defined for the purpose of determining creditable stack height under this subsection and means a maximum ground-level concentration owing to a significant downwash effect which contributes to excursion over an ambient air quality standard. For sources subject to PSD review (WAC 173-400-141 and 40 CFR 52.21) an excessive concentration alternatively means a maximum ground-level concentration owing to a significant downwash effect which contributes to excursion over a PSD increment. The emission rate used in this demonstration shall be the emission rate specified in the state implementation plan, or in the absence of such, the actual emission rate of the source. "Significant downwash effect" means a maximum ground-level concentration due to emissions from a stack due in whole or in part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least forty percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-200, filed 2/19/91, effective 3/22/91.]

WAC 173-400-205 Adjustment for atmospheric conditions. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant is prohibited, except as directed according to air pollution episode regulations.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-205, filed 2/19/91, effective 3/22/91.]

WAC 173-400-210 Emission requirements of prior jurisdictions. Any emissions unit that was under the jurisdiction of an authority and now is under the jurisdiction of ecology, shall meet all emission requirements that were applicable prior to transfer of jurisdiction if those standards are more stringent than the standards of this chapter or the specific chapter relating to that source.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-210, filed 2/19/91, effective 3/22/91.]

WAC 173-400-220 Requirements for board members. (1) **Public interest.** A majority of the members of any ecology or authority board shall represent the public interest. A majority of the members of such boards, shall not derive any significant portion of their income from persons subject to enforcement orders pursuant to the state and federal clean air acts. An elected public official and the board shall be presumed to represent the public interest. In the event that a member derives a significant portion of his/her income from persons subject to enforcement orders, he/she shall delegate sole responsibility for administration of any part of the program which involves these persons to an assistant.

(2) **Disclosure.** Each member of any ecology or authority board shall adequately disclose any potential conflict of interest in any matter prior to any action or consideration thereon, and the member shall remove themselves from participation as a board member in any action or voting on such matter.

(3) **Define significant income.** For the purposes of this section, "significant portion of income" shall mean twenty percent of gross personal income for a calendar year. In the case of a retired person, "significant portion of income" shall mean fifty percent of income in the form of pension or retirement benefits from a single source other than Social Security. Income derived from employment with local or state govern-

ment shall not be considered in the determination of "significant portion of income."

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-220, filed 2/19/91, effective 3/22/91.]

WAC 173-400-230 Regulatory actions. Ecology may take any of the following regulatory actions to enforce this chapter to meet the provisions of RCW 43.21B.300 which is incorporated by reference.

(1) **Enforcement actions by ecology—Notice to violators.** At least thirty days prior to the commencement of any formal enforcement action under RCW 70.94.430 and 70.94.431, the department of ecology shall cause written notice to be served upon the alleged violator or violators. The notice shall specify the provision of this chapter or the rule or regulation alleged to be violated, and the facts alleged to constitute a violation thereof, and may include an order that necessary corrective action be taken within a reasonable time. In lieu of an order, ecology may require that the alleged violator or violators appear before it for the purpose of providing ecology information pertaining to the violation or the charges complained of. Every notice of violation shall offer to the alleged violator an opportunity to meet with ecology prior to the commencement of enforcement action.

(2) **Civil penalties.**

(a) In addition to or as an alternate to any other penalty provided by law, any person who violates any of the provisions of chapter 70.94 or 70.120 RCW, or any of the rules in force under such chapters may incur a civil penalty in an amount as set forth in RCW 70.94.431. Each such violation shall be a separate and distinct offense, and in case of a continuing violation, each day's continuance shall be a separate and distinct violation.

Any person who fails to take action as specified by an order issued pursuant to this chapter shall be liable for a civil penalty as set forth by RCW 70.94.431 for each day of continued noncompliance.

(b) Penalties incurred but not paid shall accrue interest, beginning on the ninety-first day following the date that the penalty becomes due and payable, at the highest rate allowed by RCW 19.52.020 on the date that the penalty becomes due and payable. If violations or penalties are appealed, interest shall not begin to accrue until the thirty-first day following final resolution of the appeal.

The maximum penalty amounts established in RCW 70.94.431 may be increased annually to account for inflation as determined by the state office of the economic and revenue forecast council.

(c) Each act of commission or omission which procures, aids, or abets in the violation shall be considered a violation under the provisions of this section and subject to the same penalty. The penalties provided in this section shall be imposed pursuant to RCW 43.21B.300.

(d) All penalties recovered under this section by ecology shall be paid into the state treasury and credited to the air pollution control account established in RCW 70.94.015 or, if recovered by the authority, shall be paid into the treasury of the authority and credited to its funds. If a prior penalty for the same violation has been paid to a local authority, the penalty imposed by ecology under subsection (a) of this section shall be reduced by the amount of the payment.

(e) To secure the penalty incurred under this section, the state or the authority shall have a lien on any vessel used or operated in violation of this chapter which shall be enforced as provided in RCW 60.36.050.

(f) Public or private entities that are recipients or potential recipients of ecology grants, whether for air quality related activities or not, may have such grants rescinded or withheld by ecology for failure to comply with provisions of this chapter.

(g) In addition to other penalties provided by this chapter, persons knowingly under-reporting emissions or other information used to set fees, or persons required to pay emission or permit fees who are more than ninety days late with such payments may be subject to a penalty equal to three times the amount of the original fee owed.

(3) **Assurance of discontinuance.** Personnel of ecology or an authority may accept an assurance of discontinuance of any act or practice deemed in violation of this chapter. Any such assurance shall specify a time limit during which discontinuance is to be accomplished. Failure to perform the terms of any such assurance shall constitute prima facie proof of a violation of this chapter or any order issued thereunder which make the alleged act or practice unlawful for the purpose of securing an injunction or other relief from the superior court.

(4) **Restraining orders, injunctions.** Whenever any person has engaged in, or is about to engage in, any acts or practices which constitute or will constitute a violation of any provision of this chapter, the director, after notice to such person and an opportunity to comply, may petition the superior court of the county wherein the violation is alleged to be occurring or to have occurred for a restraining order or a temporary or permanent injunction or another appropriate order.

(5) **Emergency episodes.** Ecology may issue such orders as authorized by chapter 173-435 WAC via chapter 70.94 RCW, whenever an air pollution episode forecast is declared.

(6) **Compliance orders.** Ecology may issue a compliance order in conjunction with a notice of violation. The order shall require the recipient of the notice of violation either to take necessary corrective action or to submit a plan for corrective action and a date when such action will be initiated.

[Statutory Authority: Chapter 70.94 RCW. 93-05-044 (Order 92-34), § 173-400-230, filed 2/17/93, effective 3/20/93; 91-05-064 (Order 90-06), § 173-400-230, filed 2/19/91, effective 3/22/91.]

WAC 173-400-240 Criminal penalties. Persons in violation of Title 173 WAC may be subject to the provisions of RCW 70.94.430.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-240, filed 2/19/91, effective 3/22/91.]

WAC 173-400-250 Appeals. Decisions and orders of ecology or an authority may be appealed to the pollution control hearings board pursuant to chapter 43.21B RCW and chapter 371-08 WAC.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-250, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-250, filed 2/19/91, effective 3/22/91.]

WAC 173-400-260 Conflict of interest. All board members and officials acting or voting on decisions affecting air pollution sources, must comply with the Federal Clean Air Act, as it pertains to conflict of interest, and 40 CFR 103(d) which is incorporated by reference.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-260, filed 2/19/91, effective 3/22/91.]

Chapter 173-401 WAC
OPERATING PERMIT REGULATION

WAC

PART I
OVERVIEW

WAC 173-401-100 Program overview. (1) The provisions in this chapter establish the elements of a comprehensive Washington state air operating permit program consistent with the requirements of Title V of the Federal Clean Air Act (FCAA) (42 U.S.C. 7401, et seq.).

(2) All sources subject to this regulation shall have a permit to operate that assures compliance by the source with all applicable requirements. While chapter 173-401 WAC does not impose substantive new requirements, it does require that fees be imposed on sources and that certain procedural measures be adopted especially with respect to compliance.

(3) The requirements of this chapter, including provisions regarding schedules for submission and approval or disapproval of permit applications, shall apply to the permitting of affected sources under the acid rain program, except as provided herein or modified in regulations promulgated under Title IV of the FCAA (acid rain program).

(4) Issuance of permits under this chapter may be coordinated with issuance of permits under the Resource Conservation and Recovery Act and under the Clean Water Act, whether issued by the state, the United States Environmental Protection Agency (EPA), or the United States Army Corps of Engineers.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-100, filed 10/4/93, effective 11/4/93.]

PART II
DEFINITIONS

WAC 173-401-200 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated

by reference, unless otherwise defined here. Unless a different meaning is clearly required by context, the following words and phrases, as used in this chapter, shall have the following meanings:

(1) "Affected source" means a source that includes one or more affected units.

(2) "Affected states" are the states or federally-recognized Tribal Nations:

(a) Whose air quality may be affected when a chapter 401 permit, permit modification, or permit renewal is being proposed; or

(b) That are within fifty miles of the permitted source.

(3) "Affected unit" means a fossil-fuel fired combustion device or a source that opts-in under 40 CFR part 74, that is subject to any emission reduction requirement or limitation under the Acid Rain Program.

(4) "Applicable requirement" means all of the following as they apply to emissions units in a chapter 401 source (including requirements that have been promulgated or approved by EPA, ecology or a local authority through rule making at the time of permit issuance but have future-effective compliance dates):

(a) The following provisions of the Federal Clean Air Act (FCAA):

(i) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rule making under Title I of the FCAA (Air Pollution Prevention and Control) that implements the relevant requirements of the FCAA, including any revisions to that plan promulgated in 40 CFR 52;

(ii) Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rule making under Title I, including parts C (Prevention of Significant Deterioration) or D (Plan Requirements for Nonattainment Areas), of the FCAA;

(iii) Any standard or other requirement under section 111 (New Source Performance Standards) of the FCAA, including section 111(d);

(iv) Any standard or other requirement under section 112 (Hazardous Air Pollutants) of the FCAA, including any requirement concerning accident prevention under section 112 (r)(7) of the FCAA;

(v) Any standard or other requirement of the acid rain program under Title IV of the FCAA (Acid Deposition Control) or the regulations promulgated thereunder;

(vi) Any requirements established pursuant to section 504(b) or section 114 (a)(3) of the FCAA;

(vii) Any standard or other requirement governing solid waste incineration, under section 129 of the FCAA;

(viii) Any standard or other requirement for consumer and commercial products, under section 183(e) of the FCAA;

(ix) Any standard or other requirement for tank vessels, under section 183(f) of the FCAA;

(x) Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the FCAA;

(xi) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator has determined that such requirements need not be contained in a Title V permit; and

(xii) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to WAC 173-401-635.

(b) Chapter 70.94 RCW and rules adopted thereunder. This includes requirements in regulatory orders issued by the permitting authority.

(c) In permits issued by local air pollution control authorities, the requirements of any order or regulation adopted by the authority.

(d) Chapter 70.98 RCW and rules adopted thereunder.

(e) Chapter 80.50 RCW and rules adopted thereunder.

(5) "Chapter 401 permit" or "permit" means any permit or group of permits covering a chapter 401 source that is issued, renewed, amended, or revised pursuant to this chapter.

(6) "Chapter 401 source" means any source subject to the permitting requirements of this chapter.

(7) "Continuous compliance" means collection of all monitoring data required by the permit under the data collection frequency required by the permit, with no deviations, and no other information that indicates deviations, except for unavoidable excess emissions or other operating conditions during which compliance is not required. Monitoring data includes information from instrumental (e.g., CEMS, COMS, or parameter monitors) and noninstrumental (e.g., visual observation, inspection, recordkeeping) forms of monitoring.

(8) "Delegated authority" means an air pollution control authority that has been delegated the permit program pursuant to RCW 70.94.161 (2)(b).

(9) "Designated representative" shall have the meaning given to it in section 402(26) of the FCAA and the regulations promulgated thereunder and in effect on April 7, 1993.

(10) "Draft permit" means the version of a permit for which the permitting authority offers public participation or affected state review.

(11) "Emissions allowable under the permit" means an enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or an enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

(12) "Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

(13) The "EPA" or the "administrator" means the administrator of the U.S. Environmental Protection Agency or her/his designee.

(14) "Federal Clean Air Act" or "FCAA" means the Federal Clean Air Act, also known as Public Law 88-206, 77 Stat. 392. December 17, 1963, 42 U.S.C. 7401 et seq., as last amended by the Clean Air Act Amendments of 1990, P.L. 101-549, November 15, 1990.

(15) "Final permit" means the version of a chapter 401 permit issued by the permitting authority that has completed

all review procedures required by this chapter and 40 CFR §§ 70.7 and 70.8.

(16) "General permit" means a permit which covers multiple similar sources or emissions units in lieu of individual permits being issued to each source.

(17) "Insignificant activity" or "insignificant emissions unit" means any activity or emissions unit located at a chapter 401 source which qualifies as insignificant under the criteria listed in WAC 173-401-530. These units and activities are exempt from permit program requirements except as provided in WAC 173-401-530.

(18) "Intermittent compliance" means any form of compliance other than continuous compliance. A certification of intermittent compliance under WAC 173-401-630(5) shall be filed where the monitoring data or other information available to the permittee shows either there are periods of noncompliance, or periods of time during which the monitoring required by the permit was not performed or recorded.

(19) "Major source" means any stationary source (or any group of stationary sources) that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control) belonging to a single major industrial grouping and that are described in (a), (b), or (c) of this subsection. For the purposes of defining "major source," a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same major group (i.e., all have the same two-digit code) as described in the *Standard Industrial Classification Manual,* 1987.

(a) A major source under section 112 of the FCAA, which is defined as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, ten tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the FCAA, or twenty-five tpy or more of any combination of such hazardous air pollutants. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

(b) A major stationary source of air pollutants, as defined in section 302 of the FCAA, that directly emits or has the potential to emit, one hundred tpy or more of any air pollutant (including any major source of fugitive emissions of any such pollutant). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of this section, unless the source belongs to one of the following categories of stationary source:

(i) Coal cleaning plants (with thermal dryers);

(ii) Kraft pulp mills;

(iii) Portland cement plants;

(iv) Primary zinc smelters;

(v) Iron and steel mills;

(vi) Primary aluminum ore reduction plants;

(vii) Primary copper smelters;

(viii) Municipal incinerators capable of charging more than two hundred fifty tons of refuse per day;

(ix) Hydrofluoric, sulfuric, or nitric acid plants;

(x) Petroleum refineries;

(xi) Lime plants;

(xii) Phosphate rock processing plants;

(xiii) Coke oven batteries;

(xiv) Sulfur recovery plants;

(xv) Carbon black plants (furnace process);

(xvi) Primary lead smelters;

(xvii) Fuel conversion plants;

(xviii) Sintering plants;

(xix) Secondary metal production plants;

(xx) Chemical process plants;

(xxi) Fossil-fuel boilers (or combination thereof) totaling more than two hundred fifty million British thermal units per hour heat input;

(xxii) Petroleum storage and transfer units with a total storage capacity exceeding three hundred thousand barrels;

(xxiii) Taconite ore processing plants;

(xxiv) Glass fiber processing plants;

(xxv) Charcoal production plants;

(xxvi) Fossil-fuel-fired steam electric plants of more than two hundred fifty million British thermal units per hour heat input; or

(xxvii) All other stationary source categories, which as of August 7, 1980, were being regulated by a standard promulgated under section 111 or 112 of the FCAA;

(c) A major stationary source as defined in part D of Title I of the FCAA, including:

(i) For ozone nonattainment areas, sources with the potential to emit one hundred tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," fifty tpy or more in areas classified as "serious," twenty-five tpy or more in areas classified as "severe," and ten tpy or more in areas classified as "extreme"; except that the references in this paragraph to one hundred, fifty, twenty-five, and ten tpy of nitrogen oxides shall not apply with respect to any source for which the administrator has made a finding, under section 182 (f)(1) or (2) of the FCAA, that requirements under section 182(f) of the FCAA do not apply;

(ii) For ozone transport regions established pursuant to section 184 of the FCAA, sources with the potential to emit fifty tpy or more of volatile organic compounds;

(iii) For carbon monoxide nonattainment areas (A) that are classified as "serious," and (B) in which stationary sources contribute significantly to carbon monoxide levels, sources with the potential to emit fifty tpy or more of carbon monoxide; and

(iv) For particulate matter (PM-10) nonattainment areas classified as "serious," sources with the potential to emit seventy tpy or more of PM-10.

(20) "Permit modification" means a revision to a chapter 401 permit that meets the requirements of WAC 173-401-725.

(21) "Permit program costs" means all reasonable (direct and indirect) costs required to develop and administer a per-

mit program (whether such costs are incurred by the permitting authority or other state or local agencies that do not issue permits directly, but that support permit issuance or administration).

(22) "Permit revision" means any permit modification or administrative permit amendment.

(23) "Permitting authority" means the department of ecology, local air authority, or other agency authorized under RCW 70.94.161 (3)(b) and approved by EPA to carry out a permit program under this chapter.

(24) "Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the administrator. This term does not alter or affect the use of this term for any other purposes under the FCAA, or the term "capacity factor" as used in Title IV of the FCAA or the regulations promulgated thereunder.

(25) "Proposed permit" means the version of a permit that the permitting authority proposes to issue and forwards to the administrator for review in compliance with 40 CFR 70.8.

(26) "Regulated air pollutant" means the following:

(a) Nitrogen oxides or any volatile organic compounds;

(b) Any pollutant for which a national ambient air quality standard has been promulgated;

(c) Any pollutant that is subject to any standard promulgated under section 111 of the FCAA;

(d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or

(e) Any pollutant subject to a standard promulgated under section 112 or other requirements established under section 112 of the FCAA, including sections 112 (g), (j), and (r), including the following:

(i) Any pollutant subject to requirements under section 112(j) of the FCAA. If the administrator fails to promulgate a standard by the date established pursuant to section 112(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date eighteen months after the applicable date established pursuant to section 112(e) of the FCAA; and

(ii) Any pollutant for which the requirements of section 112 (g)(2) of the FCAA have been met, but only with respect to the individual source subject to section 112 (g)(2) requirement; and

(f) Any air pollutant for which numerical emission standards, operational requirements, work practices, or monitoring requirements applicable to the source have been adopted under RCW 70.94.331, 70.94.380, and 70.94.395.

(27) "Regulated pollutant (for fee calculation)," which is used only for purposes of WAC 173-401-900, means any "regulated air pollutant" except the following:

(a) Carbon monoxide;

(b) Any pollutant that is a regulated air pollutant solely because it is a Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or

(c) Any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under section 112(r) of the FCAA.

(d) Any regulated air pollutant emitted from an insignificant activity or emissions unit as determined under WAC 173-401-530.

(28) "Renewal" means the process by which a permit is reissued at the end of its term.

(29) "Responsible official" means one of the following:

(a) For a corporation: 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 a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than two hundred fifty persons or have gross annual sales or expenditures exceeding forty-three million in 1992 dollars; or

(ii) The delegation of authority to such representative is approved in advance by the permitting authority;

(b) For a partnership or sole proprietorship: A general partner or the proprietor, respectively;

(c) For a municipality, state, federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of EPA); or

(d) For affected sources:

(i) The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder and in effect on April 7, 1993 are concerned; and

(ii) The designated representative for any other purposes under 40 CFR part 70.

(30) "Section 502 (b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

(31) "Small business stationary source" means a stationary source that:

(a) Is owned or operated by a person that employs one hundred or fewer individuals;

(b) Is a small business concern as defined in the Federal Small Business Act;

(c) Is not a major source;

(d) Does not emit fifty tons or more per year of any regulated pollutant; and

(e) Emits less than seventy-five tons per year of all regulated pollutants.

(32) "Solid waste incineration unit" (for purposes of this chapter) means a distinct operating unit of any facility which combusts any solid waste material from commercial or indus-

trial establishments or the general public (including single and multiple residences, hotels, and motels). Such term does not include incinerators or other units required to have a permit under section 3005 of the Solid Waste Disposal Act (42 U.S.C. 6925). The term "solid waste incineration unit" does not include:

(a) Materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals;

(b) Qualifying small power production facilities, as defined in section (3)(17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)) or qualifying cogeneration facilities as defined in section (3)(18)(B) of the Federal Power Act (16 U.S.C. 796 (18)(B)), which burn homogeneous waste (such as units which burn tires or used oil, but not including refuse-derived fuel) for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating, or cooling purposes; or

(c) Air curtain incinerators provided that such incinerators only burn wood wastes, yard wastes, and clean lumber and that such air curtain incinerators comply with opacity limitations to be established by the administrator by rule.

(33) "State" means any nonfederal permitting authority, including any local agency, interstate association, or statewide program.

(34) "Stationary source" means any building, structure, facility, or installation that emits or may emit any air contaminant. For purposes of this chapter, air contaminants include any regulated air pollutant or any pollutant listed under section 112(b) of the FCAA.

(35) "Title I modification" or "modification under any provision of Title I of the FCAA" means any modification under Sections 111 (Standards of Performance for New Stationary Sources) or 112 (Hazardous Air Pollutants) of the FCAA and any physical change or change in the method of operations that is subject to the preconstruction review regulations promulgated under Parts C (Prevention of Significant Deterioration) and D (Plan Requirements for Nonattainment Areas) of Title I of the FCAA.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-200, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-200, filed 5/17/94, effective 6/17/94; 93-20-075 (Order 91-68), § 173-401-200, filed 10/4/93, effective 11/4/93.]

PART III
APPLICABILITY

WAC 173-401-300 Applicability. (1) Chapter 401 sources. The provisions of this chapter apply in all areas of the state of Washington to the following sources:

(a) Any source required by the FCAA to have an operating permit. These include the following sources:

(i) Any major source as defined in WAC 173-401-200.

(ii) Any source, including an area source, subject to a standard, limitation, or other requirement under section 111 (Standards of Performance for New Stationary Sources) of the FCAA. A small municipal waste combustion unit constructed on or before August 30, 1999, and regulated under WAC 173-400-050(5) becomes subject to this chapter on July 1, 2002.

(iii) Any source, including an area source, subject to a standard or other requirement under section 112 of the FCAA, except that a source is not required to obtain a permit solely because it is subject to regulations or requirements under section 112(r) (Prevention of Accidental Releases) of the FCAA.

(iv) Any solid waste incineration units required to obtain permits under section 129 of the FCAA.

A commercial and industrial solid waste incineration unit constructed on or before November 30, 1999, and regulated under WAC 173-400-050(4) becomes subject to this chapter on July 1, 2002.

(v) Any "affected source" regulated under Title IV (Acid Deposition Control) of the FCAA.

(vi) Any source in a source category designated by the EPA pursuant to 40 CFR Part 70, as amended through April 7, 1993.

(b) Any source that the permitting authority determines may cause or contribute to air pollution in such quantity as to create a threat to the public health or welfare under RCW 70.94.161(4) using the procedures in subsection (5) of this section.

(c) Any other source which chooses to apply for a permit.

(d) Deferral. A source subject to the secondary aluminum production requirements in 40 CFR Part 63, Subpart RRR (in effect on July 1, 2000) that is not a major source and is not located at a major source as defined under 40 CFR 63.2 and is not otherwise required to obtain a chapter 401 permit is deferred from chapter 173-401 WAC until December 4, 2004. This category includes sweat furnaces, aluminum scrap shredders, thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, group 2 furnaces (processing clean charge only and no reactive fluxing), dross-only furnaces, and rotary dross coolers.

(e) A municipal solid waste landfill constructed, reconstructed or modified before May 30, 1991, and regulated under WAC 173-400-070(9) becomes subject to this chapter on September 20, 2001.

Note: Under 40 CFR 62.14352(e) (in effect on July 1, 2000), an affected landfill must have submitted its chapter 401 application so that by April 6, 2001, the permitting agency was able to determine that it was timely and complete. Under 40 CFR 70.7(b), an affected source may not operate if it has not submitted a timely and complete application.

(2) Source category exemptions.

(a) All sources listed in subsection (1)(a) of this section that are not major sources, affected sources, or solid waste incineration units required to obtain a permit pursuant to section 129(e) of the FCAA, are exempted from the obligation to obtain a chapter 401 permit until such time that:

(i) Ecology completes a rulemaking to determine whether nonmajor sources should be required to obtain permits. During this rulemaking, ecology will consider the compliance information contained in individual permit applications when evaluating the regulatory effectiveness and administrative feasibility of issuing operating permits to nonmajor sources relative to other regulatory options. This rule-

making must be completed no later than three years after the effective date of the permit program; or

(ii) The administrator completes a rulemaking to determine how the program should be structured for nonmajor sources and determines that such sources must obtain operating permits and ecology completes a rule making to adopt EPA's revised applicability criteria.

(b) Subsection (2)(a) of this section shall not apply to nonmajor sources subject to a standard or other requirement established under either section 111 or section 112 of the FCAA after July 21, 1992, if, during those rulemakings, the administrator determines that such sources must obtain a permit at an earlier date and, subsequently, ecology completes a rule making to adopt EPS's applicability criteria.

(c) Any source listed in (a) of this subsection exempt from the requirement to obtain a permit under this section may opt to apply for a permit under this chapter.

(d) The following source categories are exempt from the obligation to obtain permit:

(i) All sources and source categories that would be required to obtain a permit solely because they are subject to 40 CFR part 60, Subpart AAA - Standards of Performance for New Residential Wood Heaters; and

(ii) All sources and source categories that would be required to obtain a permit solely because they are subject to part 61, Subpart M - National Emission Standard for Hazardous Air Pollutants for Asbestos, section 6l.145, Standard for Demolition and Renovation.

(3) Emissions units and chapter 401 sources.

The permitting authority shall include in the permit all applicable requirements for all relevant emissions units in the source.

(4) Fugitive emissions. Fugitive emissions from a chapter 401 source shall be included in the permit application and the permit in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source.

(5) Process for determining threat to public health or welfare. The following criteria shall be used to identify sources that are covered pursuant to subsection (1)(b) of this section:

(a) The source may cause or to contribute air pollution in such quantity as to create a violation of any ambient air quality standard as demonstrated by a dispersion modeling analysis performed in accordance with EPA's dispersion modeling guidelines, monitoring, or other appropriate methods; or

(b) The source may cause or contribute to air pollution in such quantity as to create a significant ambient level of any class A or class B toxic air pollutant contained in chapter 173-460 WAC as demonstrated by a dispersion modeling analysis done in accordance with EPA's dispersion modeling guidelines, monitoring, or other appropriate methods.

(c) Small business stationary sources otherwise covered under (a) and (b) of this subsection are exempt except when all of the following requirements are satisfied:

(i) The source is in an area that currently exceeds or has been projected by ecology to exceed within five years any federal or state air quality standard. Prior to determining that any area threatens to exceed a standard, ecology shall hold a public hearing or hearings within the threatened area.

(ii) Ecology provides justification that requiring a source to have a permit is necessary to meet or to prevent exceeding a federal or state air quality standard.

(6) Permitting authorities shall develop and maintain a list of names of chapter 401 sources within their jurisdictions. This list shall be made available to the public. A chapter 401 source inadvertently omitted from this list is not exempted from the requirement to obtain a permit under this chapter.

(7) Federally enforceable limits. Any source which is defined as a chapter 401 source solely because its potential to emit exceeds the annual tonnage thresholds defined in WAC 173-401-200 shall be exempt from the requirement to obtain an operating permit when federally enforceable conditions which limit that source's potential to emit to levels below the relevant tonnage thresholds have been established for that source.

(a) In applying for an exemption under this subsection, the owner or operator of the source shall demonstrate to the permitting authority that the source's potential to emit, taking into account any federally enforceable restrictions assumed by the source, does not exceed the tonnage thresholds defined in WAC 173-401-200. Such demonstrations shall be in accordance with WAC 173-401-520 and shall contain emissions measurement and monitoring data, location of monitoring records, and other information necessary to support the source's emission calculations.

(b) Permitting authorities may use the following approaches to establish federally enforceable limitations:

(i) Regulatory orders. The permitting authority may establish source-specific conditions in a regulatory order issued pursuant to WAC 173-400-090.

(ii) Notice of construction approvals. The permitting authority may establish source-specific conditions in a notice of construction approval issued pursuant to state or local regulations contained in an EPA-approved state implementation plan; or

(iii) General permits. The permitting authority may establish source-category requirements which limit a source's potential to emit through a general permit issued pursuant to RCW 70.94.161(11). Following EPA approval of the general permit, limitations on potential to emit become federally enforceable against a particular source after that source applies for, and receives coverage under the general permit.

(c) A source receiving a federally enforceable limit on its potential to emit shall annually certify that its potential to emit is less than that which would require the source to obtain an operating permit. Such certifications shall contain the information specified in (a) of this subsection.

(d) Notice of issuance of any order or permit which limits a source's potential to emit shall be published in the permit register pursuant to WAC 173-401-805 (2)(e).

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-300, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-401-300, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-300, filed 10/4/93, effective 11/4/93.]

PART IV
PROGRAM DELEGATION

WAC 173-401-400 Program delegation. (1) General. Ecology is authorized to submit the state operating permit program for approval under section 502 of the Federal Clean Air Act. Subject to federal approval, ecology may, in turn, delegate the federally approved state permit program to the local authority with jurisdiction in a given area. This section describes the procedures for delegating the federally approved state operating permit program to a local authority.

(2) Application. The board of any local air pollution control authority may apply to ecology for a delegation order authorizing that authority to administer the operating permit program for sources under that authority's jurisdiction pursuant to RCW 70.94.161 (2)(b).

(3) Delegation orders. Ecology will, by order, approve such delegation if ecology finds that the authority has the technical and financial resources needed to discharge the responsibilities of a permitting authority under the FCAA. Each delegation order shall specify the terms and conditions for program delegation and define the responsibilities of the permitting authority and ecology in implementing the statewide program. All delegation orders and supporting program documentation shall be submitted to EPA for review and approval.

(4) Required information. A delegation request from the authority shall include the information specified in 40 CFR 70.4 (b)(3), (b)(7), (b)(8), and (b)(11). In addition, the request shall include a description of how the authority will meet the requirement that every proposed permit be reviewed and signed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority and, with respect to the latter, signed, dated, and stamped by the supervising professional engineer.

(5) Effective date. Any delegation order issued under this section shall take effect ninety days after the EPA authorizes the local authority to issue operating permits under the FCAA.

(6) Public notice. Ecology shall publish in the *State Register* notice of proposed decisions on program delegation and substantial program revision. The notice shall summarize the proposal and provide at least a thirty-day public comment period. EPA review of these requests may occur concurrently with the state process. Notice of approval of program delegation and substantial program revision requests shall be published in the *State Register*. Notice of approval of minor program revisions may be given by a letter from ecology to the authority.

(7) Performance review. Reviews of the implementation of the operating permit program by ecology and delegated local authorities shall be conducted as provided in WAC 173-401-920.

(8) Program revisions. Revisions to the state program, EPA approval of those revisions, and delegation to local authorities shall be implemented using the procedures in subsections (1) through (6) of this section.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-400, filed 10/4/93, effective 11/4/93.]

PART V
PERMIT APPLICATIONS

WAC 173-401-500 Permit applications. (1) Source identification. Within ninety days after the date that a permitting authority submits for EPA approval a permit program or partial permit program, the permitting authority shall notify each potential chapter 401 source within its jurisdiction that the source may be required to obtain a permit. Failure of the permitting authority to notify a source shall not relieve that source from the obligation to file a timely and complete application.

(2) Application distribution. No later than thirty days after EPA grants final or interim, full or partial, approval to the state program, the responsible permitting authority shall send an application to each potential chapter 401 source within its jurisdiction, and a notice stating a deadline by which an application must be filed. Failure of the permitting authority to distribute permit or renewal applications to an individual source shall not relieve that source from the obligation to file a timely and complete application. Renewal applications shall be sent to the source as specified in WAC 173-401-710.

(3) Duty to apply. For each chapter 401 source, the owner or operator shall submit a timely and complete permit application in accordance with this section. Whenever practicable, the applicant shall utilize methods provided by the permitting authority for electronic transmission of the completed application.

(a) Existing chapter 401 sources. Chapter 401 sources in existence on the date of EPA approval of the state permit program shall submit permit applications no later than one hundred eighty days after EPA approval of the state permitting program.

(b) Existing sources becoming chapter 401 sources due to future regulations. An existing source may become subject to the operating permit program as a result of regulations promulgated after EPA approval of the state permit program. For those sources, a complete application must be submitted within twelve months from the time that the source becomes subject to the permit program.

(c) New or modified sources. New or modified chapter 401 sources which commence operation after EPA approval of the state operating program shall file a complete application to obtain the chapter 401 permit or permit revision within twelve months after commencing operation. Where an existing chapter 401 permit would prohibit such construction or change in operation, the source must obtain a permit revision before commencing operation. The applicant may elect to integrate procedures for new source review and operating permit issuance as described in subsection (10) of this section.

(d) Permit renewal. For purposes of permit renewal, a timely application is one that is submitted at the time specified in WAC 173-401-710.

(e) Applications for initial phase II acid rain permits shall be submitted to the permitting authority by January 1, 1996, for sulfur dioxide, and by January 1, 1998, for nitrogen oxides.

(4) Complete application. To be deemed complete, an application must provide all information required pursuant to WAC 173-401-510, except that applications for permit revision need supply such information only if it is related to the proposed change. Information submitted under WAC 173-401-510 must be sufficient to evaluate the subject source and its application and to determine all applicable requirements. A responsible official shall certify the submitted information consistent with WAC 173-401-520. Unless the permitting authority determines in writing that an application is not complete within sixty days of receipt of the application, such application shall be deemed to be complete, except as otherwise provided in WAC 173-401-700(6). Any notification of incompleteness shall specify the information needed to make the application complete and prescribe a reasonable time frame for response from the applicant. Unless the permitting authority requests additional information or otherwise notifies the applicant of incompleteness within sixty days of receipt of the supplemental information, the application shall be deemed complete. If, while processing an application that has been determined or deemed to be complete, the permitting authority determines that additional information is necessary to evaluate or take final action on that application, it may request such information in writing and set a reasonable deadline for a response. The source's ability to operate without a permit, as set forth in WAC 173-401-705(2), shall be in effect from the date the application is determined or deemed to be complete until the final permit is issued, provided that the applicant submits any requested additional information by the deadline specified by the permitting authority.

(5) Confidential information. In the case where a source has submitted information to the permitting authority under a claim of confidentiality, the permitting authority may also require the source to submit a copy of such information directly to the administrator.

(6) Duty to supplement or correct application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

(7) Completeness criteria. An application is complete when it contains the following information:

(a) All of the data described in WAC 173-401-510(2), including the required information for each emission unit (other than insignificant emission units) at the facility, along with any necessary supporting data and calculations. The use of a standard application is not required if all of the data elements required in WAC 173-401-510(2) are provided;

(b) A compliance plan that meets the criteria of WAC 173-401-630; and

(c) Certification by a responsible official of the chapter 401 source of the truth, accuracy, and completeness of the application, as provided in WAC 173-401-520.

(8) EPA notification. The permitting authority shall provide EPA with a copy of all complete permit applications and compliance plans for chapter 401 sources unless EPA waives or modifies this requirement.

(9) Public notice. Ecology shall publish a notice of all applications received under this section in the permit register as required under WAC 173-401-805.

(10) Operating permits for new sources. At the time of filing a notice of construction application under RCW 70.94.152 for the construction of a new source or modification of an existing source, the owner or operator may elect in writing to integrate new source review and operating permit issuance. Procedures for integration of these two processes are as follows:

(a) Modification of existing source. The owner or operator of an existing permitted source applying to modify the source within the meaning of RCW 70.94.030(14) may select integrated review by so indicating on its notice of construction application. The permitting authority shall process the notice of construction application in accordance with the procedures set forth in WAC 173-401-700. The permitting authority shall process the two applications in parallel, and consolidate all required public hearings, comment periods and EPA review periods. A proposed order of approval for the modification shall be provided to EPA for review as provided in WAC 173-401-810, along with a proposed administrative permit amendment to the source's operating permit. The administrative permit amendment shall incorporate into the operating permit the requirements contained in the order of approval. The order of approval shall include compliance requirements for the new or modified emissions units that meet the requirements of WAC 173-401-600 through 173-401-650. The permitting authority shall issue the final permit amendment and order of approval promptly upon conclusion of the EPA review period, unless EPA files a timely objection as provided in 40 CFR 70.8.

(b) Construction of new source. Any person who proposes to construct a new source, within the meaning of RCW 70.94.030(16), may select integrated review by concurrently filing with the permitting authority a notice of construction application and an operating permit application. The permitting authority shall process both applications in accordance with the procedures set forth in WAC 173-401-700. The permitting authority shall process the two applications in parallel, and consolidate all required public hearings, comment periods, and EPA review periods. A proposed order of approval for the new source shall be provided to EPA for review as provided in WAC 173-401-810, along with the proposed operating permit. The permitting authority shall issue the final operating permit and order of approval promptly upon conclusion of the EPA review period, unless EPA files a timely objection as provided in 40 CFR 70.8.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-500, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-500, filed 10/4/93, effective 11/4/93.]

WAC 173-401-510 Permit application form. (1) Standard application form and required information. Ecology shall develop a standard application form or forms to be used by each permitting authority. Information as described below for each emissions unit at a chapter 401 source other than

insignificant emissions units shall be included in the application. However, an application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to evaluate the fee amount required under the permitting authority's fee schedule.

(2) Required data elements for individual permit applications. The application forms developed under subsection (1) of this section shall contain the data elements specified below:

(a) Identifying information, including company name and address (or plant name and address if different from the company name), owner's name and agent, responsible official name and address, and telephone number and names of plant site manager/contact.

(b) A description of the source's processes and products (by Standard Industrial Classification Code) including any associated with each alternative operating scenario identified by the source pursuant to WAC 173-401-650.

(c) The following emissions-related information:

(i) All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except emissions from insignificant emission units or activities as defined in WAC 173-401-530. The permitting authority shall require additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the source, and other information necessary to collect any permit fees owed under the permitting authority's fee schedule;

(ii) Identification and description of all points of emissions described in (c)(i) of this subsection in sufficient detail to establish the basis for fees and applicability of applicable requirements;

(iii) Emissions rates in tons per year (tpy) and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method;

(iv) The following information to the extent it is needed to determine or regulate emissions: Fuels, fuel use, raw materials, production rates, and operating schedules;

(v) Identification and description of all air pollution control equipment and compliance monitoring devices or activities;

(vi) Limitations on source operation affecting emissions or any work practice standards, where applicable, for all regulated pollutants at the chapter 401 source;

(vii) Other information required by any applicable requirement (including information related to stack height limitations developed pursuant to section 123 of the FCAA); and

(viii) Calculations on which the information in (c)(i) through (vii) of this subsection are based.

(d) The following air pollution control requirements:

(i) Citation and description of all applicable requirements; and

(ii) Description of or reference to any applicable test method for determining compliance with each applicable requirement.

(e) Other specific information that may be necessary to implement and enforce other applicable requirements or this chapter or to determine the applicability of such requirements.

(f) An explanation of any proposed exemptions from otherwise applicable requirements.

(g) Additional information as determined to be necessary by the permitting authority to define alternative operating scenarios identified by the source pursuant to WAC 173-401-650(1) or to define permit terms and conditions implementing WAC 173-401-650(e) and 173-401-722.

(h) A compliance plan for all chapter 401 sources that contains all the following:

(i) A description of the compliance status of the source with respect to all applicable requirements;

(ii) A description as follows:

(A) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements;

(B) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis; and

(C) For requirements for which the source is not in compliance at the time of permit issuance, a narrative description of how the source will achieve compliance with such requirements;

(iii) A compliance schedule as follows:

(A) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements;

(B) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis;

(C) A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based;

(iv) For those sources required to have a schedule of compliance to remedy a violation, a schedule for submission of certified progress reports every six months or at a more frequent period specified in an applicable requirement.

(v) The compliance plan content requirements specified in this paragraph shall apply and be included in the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under Title IV of the FCAA with regard to the schedule and method(s) the source will use to achieve compliance with the acid rain emissions limitations.

(i) Requirements for compliance certification, including the following:

(i) A certification of compliance with all applicable requirements by a responsible official consistent with WAC 173-401-520 and section 114 (a)(3) of the FCAA;

(ii) A statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods;

(iii) A schedule for submission of compliance certifications during the permit term, to be submitted annually, or more frequently if specified by the underlying applicable requirement; and

(iv) A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements of the FCAA.

(j) The use of nationally standardized forms for acid rain portions of permit applications and compliance plans, as required by regulations promulgated under Title IV of the FCAA and in effect on April 7, 1993.

(k) Requirements which the source believes are inapplicable pursuant to WAC 173-401-640(2) and a request to extend the permit shield to those requirements.

[Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-510, filed 5/17/94, effective 6/17/94; 93-20-075 (Order 91-68), § 173-401-510, filed 10/4/93, effective 11/4/93.]

WAC 173-401-520 Certification. Any application form, report, or compliance certification submitted pursuant to this chapter shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this chapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-520, filed 10/4/93, effective 11/4/93.]

WAC 173-401-530 Insignificant emission units. (1) General. This section contains criteria for identifying insignificant emission units or activities for purposes of the operating permit program. Designation of an emission unit or activity as insignificant for purposes of this chapter does not exempt the unit or activity from any applicable requirement. An emission unit or activity is insignificant based on one or more of the following approaches:

(a) Actual emissions of all regulated air pollutants from a unit or activity are less than the emission thresholds established in subsection (4) of this section. Such emission units and activities must be listed in the permit application;

(b) The emission unit or activity is listed in WAC 173-401-532 as categorically exempt. Such emission units or activities do not have to be listed in the permit application;

(c) The emission unit or activity is listed in WAC 173-401-533 and is considered insignificant if its size or production rate based on maximum rated capacity is below the specified level. These emission units or activities must be listed in the permit application.

(d) The emission unit or activity generates only fugitive emissions (as defined in WAC 173-400-030(31)), which are subject to no applicable requirement other than generally applicable requirements of the state implementation plan as defined in subsection (2) of this section. These units or activities must be listed on the permit application.

(2) Applicable requirements.

(a) Notwithstanding any other provision of this chapter, no emissions unit or activity subject to a federally enforceable applicable requirement (other than generally applicable requirements of the state implementation plan) shall qualify as an insignificant emissions unit or activity. For purposes of this section, generally applicable requirements of the state implementation plan are those federally enforceable requirements that apply universally to all emission units or activities without reference to specific types of emission units or activities.

(b) The application shall list and the permit shall contain all generally applicable requirements that apply to insignificant emission units or activities in the source.

(c) Testing, monitoring, recordkeeping and reporting are not required for insignificant emissions units and activities unless determined by the permitting authority to be necessary to assure compliance or unless it is otherwise required by a generally applicable requirement of the state implementation plan. This section does not affect the authority of ecology and local air authorities to establish case-by-case monitoring requirements as set forth in WAC 173-400-105 or other provisions of law.

(d) Where a permit does not require testing, monitoring, recordkeeping and reporting for insignificant emissions units or activities, the permittee may certify continuous compliance if there were no observed, documented, or known instances of noncompliance during the reporting period. Where a permit requires testing, monitoring, recordkeeping and reporting for insignificant emission units or activities, the permittee may certify continuous compliance when the testing, monitoring, recordkeeping required by the permit revealed no violations during the period, and there were no observed, documented, or known instances of noncompliance during the reporting period.

(3) Permit shield. The permit shield described in WAC 173-401-640 shall not apply to any insignificant emissions unit or activity designated under this section.

(4) Insignificant emission thresholds. An emission unit or activity shall be considered insignificant if it qualifies under subsection (1)(b), (c) or (d) of this section, or if its actual emissions, based on methods approved by the permitting authority, are below the practical quantification limit (PQL), or are less than or equal to all of the following threshold levels:

(a) 5 tons per year of carbon monoxide;

(b) 2 tons per year of nitrogen oxides;

(c) 2 tons per year of sulfur oxides;

(d) 2 tons per year of volatile organic compounds (VOC);

(e) 0.75 tons per year of PM_{10} (as defined in WAC 173-400-030);

(f) 0.005 tons per year of lead;

(g) 0.15 tons per year of fluorides;

(h) 0.35 tons per year of sulfuric acid mist;

(i) 0.5 tons per year of hydrogen sulfide;

(j) 0.5 tons per year of total reduced sulfur (including hydrogen sulfide);

(k) 0.000000175 tons per year of municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans);

(m) 0.75 tons per year of municipal waste combustor metals (measured as PM);

(n) 2.0 tons per year of municipal waste combustor acid gases (measured as SO_2 and hydrogen chloride);

(o) 2.0 tons per year of ozone depleting substances in aggregate (the sum of Class I and/or Class II substances as defined in Title VI and 40 CFR Part 82);

(p) Thresholds levels for hazardous air pollutants as defined in WAC 173-401-531;

(q) 0.5 tons per year for any regulated air pollutant not listed above or in WAC 173-401-531.

(5) Documentation.

(a) Upon request from the permitting authority the applicant must provide sufficient documentation to enable the permitting authority to determine that the emission unit or activity has been appropriately listed as insignificant.

(b) Upon request from the permitting authority, at any time during the term of the permit, an applicant who lists an activity or emissions unit as insignificant under subsection (1)(a) of this section shall demonstrate to the permitting authority that the actual emissions of the unit or activity are below the emission thresholds listed in subsection (4) of this section.

(6) Permit revision.

If an emission unit or activity that qualifies as insignificant solely on the basis of subsection (1)(a) of this section exceeds one of the emissions thresholds specified in subsection (4) of this section prior to issuance of a permit, the applicant shall promptly amend its permit application to include the relevant activity or emissions unit in the permit, as provided in WAC 173-401-500(6). Once the permit is issued, an activity or emissions unit that qualifies as insignificant solely on the basis of subsection (1)(a) of this section shall not exceed the emissions thresholds specified in subsection (4) of this section, until the permit is modified pursuant to WAC 173-401-725 (Permit modifications).

(7) Local air authority discretion. Local air authorities may establish by rule other criteria for defining insignificant emissions units or activities. At a minimum, such criteria must be at least as stringent as the requirements in subsections (2) and (3) of this section. Insignificant emission units or activities defined by local air authority rule may not exceed threshold levels established under subsection (4) of this section.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-530, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-530, filed 5/17/94, effective 6/17/94.]

WAC 173-401-531 Thresholds for hazardous air pollutants. General. The following tables provide thresholds for hazardous air pollutants:

(1) Carcinogens:

CAS Number	Chemical Name	Threshold Levels (tons/year)
189-55-9	1, 2, 7, 8-dibenzopyrene	0.005
107-06-2	1, 2-dichloroethane	0.4
78-87-5	1, 2-dichloropropane	0.5
540-73-8	1, 2-dimethylhydrazine	0.004
122-66-7	1, 2-diphenylhydrazine	0.045
106-99-0	1, 3-butadiene	0.035
1120-71-4	1, 3-propane sultone	0.003
106-46-7	1, 4-dichlorobenzene (p)	0.5
123-91-1	1, 4-dioxane (1, 4-diethyleneoxide)	0.5
94-75-7	2, 4-d salts & esters	0.5
95-80-7	2, 4-toluene diamine	0.01
584-84-9	2, 4-toluene diisocyanate	0.05
53-96-3	2-acetylaminofluorene	0.0025
119-90-4	3, 3'-dimethoxybenzidine	0.5
119-93-7	3, 3-dimethyl benzidine	0.004
101-14-4	4, 4'-methylenebis (2-chloroaniline)	0.5
75-07-0	acetaldehyde	0.5
107-13-1	acrylonitrile	0.15
62-53-3	aniline	0.5
C7440-38-2	arsenic and inorganic arsenic compounds	0.002
1332-21-4	asbestos (fibers/ml)	0.00004
71-43-2	benzene	0.5
92-87-5	benzidine (and its salts)	0.00015
56-55-3	benzo(a)anthracene	0.005
50-32-8	benzo(a)pyrene	0.005
205-99-2	benzo(b)fluoranthene	0.005
7440-41-7	beryllium and compounds (except salts)	0.004
117-81-7	bis (2-ethylhexyl) phthalate	0.5
542-88-1	bis (chloromethyl) ether	0.00015
75-25-2	bromoform	0.5
7440-43-9	cadmium and compounds	0.005
56-23-5	carbon tetrachloride	0.5
57-74-9	chlordane	0.005
510-15-6	chlorobenzilate	0.2
67-66-3	chloroform	0.45
107-30-2	chloromethyl methyl ether	0.1
126-99-8	chloroprene	0.5
C7440-47-3	chromium, hexavalent metal	0.001
218-01-9	chrysene	0.005
———	coke oven emissions	0.015
3547-04-4	DDE	0.005
53-70-3	dibenz(a, h)anthracene	0.005
132-64-9	dibenzofuran	0.5
111-44-4	dichloroethyl ether	0.03
75-09-2	dichloromethane	0.5
77-78-1	dimethyl sulfate	0.1
———	dioxins & furans (tcdd equivalent)	3e-07
106-89-8	epichlorohydrin	0.5
107-06-2	ethylene dichloride	0.4
106-93-4	ethylene dibromide (dibromethane)	0.05
75-21-8	ethylene oxide	0.1
96-45-7	ethylene thiourea	0.3
76-44-8	heptachlor	0.01
118-74-1	hexachlorobenzene	0.005
58-89-9	hexachlorocyclohexane, gamma	0.005
302-01-2	hydrazine	0.002
193-39-5	indeno (1, 2, 3-cd) pyrene	0.005
———	lead & compounds (except those listed)	0.005
58-89-9	lindane	0.005
75-09-2	methylene chloride	0.5
62-75-9	n-nitrosodimethylamine	0.0005
C7440-02-0	nickel and compounds (except those listed)	0.02
13463-39-3	nickel carbonyl	0.1
95-53-4	o-toluidine	0.5
87-86-5	pentachlorophenol	0.35
127-18-4	perchloroethylene	0.5
1336-36-3	polychlorinated biphenyls	0.0045
75-56-9	propylene oxide	0.5
8001-35-2	toxaphene	0.005
79-01-6	trichloroethylene	0.5
75-01-4	vinyl chloride	0.1
79-34-5	1, 1, 2, 2-tetrachloroethane	0.15
79-00-5	1, 1, 2-trichloroethane	0.5
57-14-7	1, 1-dimethyl hydrazine	0.004
96-12-8	1, 2-dibromo-3-chloropropane	0.004
79-06-1	acrylamide	0.01

CAS Number	Chemical Name	Threshold Levels (tons/year)
98-07-7	benzotrichloride	0.003
62-73-7	dichlorvos	0.1
79-44-7	dimethyl carbamoyl chloride	0.5
140-88-5	ethyl acrylate	0.5
51-79-6	ethyl carbamate	0.5
151-56-4	ethylene imine	0.5
87-68-3	hexachlorobutadiene	0.5
67-72-1	hexachloroethane	0.5
60-34-4	methyl hydrazine	0.03
684-93-5	n-nitroso-n-methylurea	0.5
12035-72-2	nickel refinery dust	0.08
———	nickel subsulfide	0.02
82-68-8	pentachloronitrobenzene	0.15
91-22-5	quinoline	0.003
1582-09-8	trifluralin	0.5
593-60-2	vinyl bromide	0.5
75-35-4	vinylidene chloride	0.2
189559	1, 2: 7, 8-dibenzopyrene	0.005
121142	2, 4-dinitrotoluene	0.01
88062	2, 4, 6-trichlorophenol	0.5
91941	3, 3-dichlorobenzidene	0.1
57596	7, 12-dimethylbenz(a)anthracene	0.005
50000	formaldehyde	0.5

(2) Noncarcinogens:

CAS Number	Chemical Name	Threshold Levels (tons/year)
75-34-3	ethylidene dichloride (1, 1-dichloroethane)	0.5
75-55-8	1, 2 propylenimine (2-methyl aziridine)	0.003
120-82-1	1, 2, 4-trichlorobenzene	0.5
106-88-7	1, 2-epoxybutane	0.5
542-75-6	1, 3-dichloropropene (dichloropropene)	0.5
51-28-5	2, 4-dinitrophenol	0.5
111-76-2	2-butoxyethanol	0.5
110-80-5	2-ethoxyethanol	0.5
109-86-4	2-methoxyethanol	0.5
92-93-3	4-nitrobiphenol	0.5
100-02-7	4-nitrophenol	0.5
75-05-8	acetonitrile	0.5
98-86-2	acetophenone	0.5
107-02-8	acrolein	0.04
79-10-7	acrylic acid	0.5
107-05-1	allyl chloride	0.5
C7440-36-0	antimony & compounds as sb	0.5
1309-64-4	antimony trioxide, as sb	0.5
7784-42-1	arsine	0.1
100-44-7	benzyl chloride	0.1
92-52-4	biphenyl	0.5
156-62-7	calcium cyanamide	0.5
105-60-2	caprolactam, dust	0.5
105-60-2	caprolactam, vapor	0.5
133-06-2	captan	0.5
63-25-2	carbaryl	0.5
75-15-0	carbon disulfide	0.5
463-58-1	carbonyl sulfide	0.5
120-80-9	catechol	0.5
7782-50-5	chlorine	0.1
79-11-8	chloroacetic acid	0.1
532-27-4	chloroacetophenone, alpha-	0.06
108-90-7	chlorobenzene	0.5
C7440-47-3	chromium (ii) compounds, as cr	0.5
C7440-47-3	chromium (iii) compounds, cr	0.5
10210-68-1	cobalt carbonyl, as co	0.1
7440-48-4	cobalt, as co metal dust, fume	0.1
1319-77-3	cresols/cresylic acid, (isomers and mixture)	0.5
95-48-7	o-cresol	0.5
108-39-4	m-cresol	0.5
106-44-5	p-cresol	0.5
98-82-8	cumene	0.5
51-12-5	cyanides, as cn	0.5
84-74-2	dibutyl phthalate	0.5
111-42-2	diethanolamine	0.5
60-11-7	dimethyl aminoazobenzene	0.5
121-69-7	dimethylaniline	0.5
68-12-2	dimethylformamide	0.5
131-11-3	dimethylphthalate	0.5
100-41-4	ethyl benzene	0.5
75-00-3	ethyl chloride	0.5
107-21-1	ethylene glycol	0.5
111-76-2	ethylene glycol monobutyl ether	0.5
———	glycol ethers (except for listed ones)	0.5
77-47-4	hexachlorocyclopentadiene	0.1
822-06-0	hexamethylene, 1, 6-diisocyanate	0.02
110-54-3	hexane (n-hexane)	0.5
110-54-3	hexane, other isomers	0.5
7647-01-0	hydrogen chloride	0.5
7664-39-3	hydrogen fluoride, as f	0.1
123-31-9	hydroquinone	0.5
78-59-1	isophorone	0.5
108-31-6	maleic anhydride	0.5
C7439-96-5	manganese dust & compounds (except listed)	0.5
748-79-4	mercuric chloride	0.01
10045-94-0	mercuric nitrate	0.01
C7439-97-6	mercury, elemental	0.01
72-43-5	methoxychlor	0.5
67-56-1	methyl alcohol	0.5
74-83-9	methyl bromide	0.5
74-87-3	methyl chloride	0.5
71-55-6	methyl chloroform (1, 1, 1-trichloroethane)	0.5
78-93-3	methyl ethyl ketone (mek)	0.5
74-88-4	methyl iodide	0.06
108-10-1	methyl isobutyl ketone	0.5
624-83-9	methyl isocyanate	0.1
80-62-6	methyl methacrylate	0.5
1634-04-4	methyl tert-butyl ether	0.5
12108-13-3	methylcyclopentadienyl manganese tricarbonyl	0.1
101-68-8	methylene bisphenyl isocyanate	0.1
91-20-3	naphthalene	0.5
98-95-3	nitrobenzene	0.5
106-50-3	p-phenylenediamine	0.5
56-38-2	parathion	0.1
108-95-2	phenol	0.1
62-38-4	phenyl mercuric acetate	0.01
75-44-5	phosgene	0.1
7803-51-2	phosphine	0.5
7723-14-0	phosphorus	0.1
85-44-9	phthalic anhydride	0.5
57-57-8	propiolactone, beta-	0.1
123-38-6	propionaldehyde	0.5
114-26-1	propoxur	0.5
106-51-4	quinone	0.5
C7782-49-2	selenium compounds, as se	0.5
7783-79-1	selenium hexafluoride, as se	0.5
7488-56-4	selenium sulfides (mono and di)	0.5
100-42-5	styrene monomer	0.5
78-00-2	tetraethyl lead, as pb	0.01
75-74-1	tetramethyl lead, as pb	0.01
7550-45-0	titanium tetrachloride	0.1
108-88-3	toluene	0.5
121-44-8	triethylamine	0.5
108-05-4	vinyl acetate	0.5
593-60-2	vinyl bromide	0.5
1330-20-7	xylenes (m-,o-,p-isomers)	0.5
79469	2-nitropropane	0.5
540841	2, 2, 4-trimethylpentane	0.5
95954	2, 4, 5-trichlorophenol	0.5
92671	4-aminobiphenyl	0.5
101779	4, 4'-methlenedianiline	0.5

CAS Number	Chemical Name	Threshold Levels (tons/year)
534521	4, 6-dinitro-o-cresol and salts	0.1
60355	acetamide	0.5
1345046	antimony trisulfide	0.1
7783702	antimony pentafluoride	0.1
28300745	antimony potassium tartrate	0.5
133904	chloramben	0.5
2 ———	chromium compounds, except hexavalent and trivalent	0.5
10025737	chromic chloride	0.1
334883	diazomethane	0.5
64675	diethyl sulfate	0.5
62207765	fluomine	0.1
680319	hexamethylphosphoramide	0.01
12108133	methylcyclopentadienyl manganese	0.1
101688	methylene diphenyl diisocyanate	0.1
69892	N-nitrosomorpholine	0.5
90040	o-anisidine	0.5
———	polycyclic organic matter	0.01
151508	potassium cyanide	0.1
14339	sodium cyanide	0.1
10102188	sodium selenite	0.1
13410010	sodium selenate	0.1
96093	styrene oxide	0.5

[Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-531, filed 5/17/94, effective 6/17/94.]

WAC 173-401-532 Categorically exempt insignificant emission units. (1) General. This section contains lists of units and activities that are categorically exempt from this chapter. The activities listed in this section may be omitted from the permit application.

(2) Mobile transport tanks on vehicles, except for those containing asphalt.

(3) Lubricating oil storage tanks.

(4) Storage tanks, reservoirs and pumping and handling equipment of any size, limited to soaps, lubricants, hydraulic fluid, vegetable oil, grease, animal fat, aqueous salt solutions or other materials and processes using appropriate lids and covers where there is no generation of objectionable odor or airborne particulate matter.

(5) Pressurized storage of oxygen, nitrogen, carbon dioxide, air, or inert gases.

(6) Storage of solid material, dust-free handling.

(7) Vehicle exhaust from auto maintenance and repair shops.

(8) Vents from continuous emissions monitors and other analyzers.

(9) Vents from rooms, buildings and enclosures that contain permitted emissions units or activities from which local ventilation, controls and separate exhaust are provided.

(10) Internal combustion engines for propelling or powering a vehicle.

(11) Recreational fireplaces including the use of barbecues, campfires and ceremonial fires.

(12) Brazing, soldering and welding equipment and oxygen-hydrogen cutting torches for use in cutting metal where in components of the metal do not generate HAPs or HAPs precursors.

(13) Atmospheric generators used in connection with metal heat treating processes.

(14) Metal finishing or cleaning using tumblers.

(15) Metal casting molds and molten metal crucibles that do not contain potential HAPs.

(16) Die casting.

(17) Metal or glass heat-treating, in absence of molten materials, oils, or VOCs.

(18) Drop hammers or hydraulic presses for forging or metalworking.

(19) Electrolytic deposition, used to deposit brass, bronze, copper, iron, tin, zinc, precious and other metals not listed as the parents of HAPs.

(20) Metal fume vapors from electrically heated foundry/forge operations wherein the components of the metal do not generate HAPs or HAP precursors. Electric arc furnaces are excluded from consideration for listing as insignificant.

(21) Metal melting and molten metal holding equipment and operations wherein the components of the metal do not generate HAPs or HAP precursors. Electric arc furnaces are not considered for listing as insignificant.

(22) Inspection equipment for metal products.

(23) Plastic and resin curing equipment, excluding FRP.

(24) Extrusion equipment, metals, minerals, plastics, grain or wood.

(25) Presses and vacuum forming, for curing rubber and plastic products or for laminating plastics.

(26) Roller mills and calendars, rubber and plastics.

(27) Conveying and storage of plastic pellets.

(28) Plastic compression, injection, and transfer molding and extrusion, rotocasting, pultrusion, blowmolding, excluding acrylics, PVC, polystyrene and related copolymers and the use of plasticizer. Only oxygen, carbon dioxide, nitrogen, air, or inert gas allowed as blowing agents.

(29) Plastic pipe welding.

(30) Nonmetallic mineral mines and screening plants except for crushing and associated activities that are not subject to 40 CFR Part 60 Subpart 000. Quarrying of silica rock and associated activities are not considered for listing as insignificant.

(31) Wet sand and gravel screening.

(32) Wax application.

(33) Plant upkeep including routine housekeeping, preparation for and painting of structures or equipment, retarring roofs, applying insulation to buildings in accordance with applicable environmental and health and safety requirements and paving or stripping parking lots.

(34) Agricultural activities on a facility's property that are not subject to registration or new source review by the permitting authority.

(35) Cleaning and sweeping of streets and paved surfaces.

(36) Ultraviolet curing processes.

(37) Hot melt adhesive application with no VOCs in the adhesive formulation.

(38) Laundering, dryers, extractors, tumblers for fabrics, using water solutions of bleach and/or detergents.

(39) Steam cleaning operations.

(40) Steam sterilizers.

(41) Food preparing for human consumption including cafeterias, kitchen facilities and barbecues located at a source for providing food service on the premises.

(42) Portable drums and totes.

(43) Lawn and landscaping activities.

(44) Flares used to indicate danger to the public.

(45) General vehicle maintenance including vehicle exhaust from repair facilities.

(46) Comfort air conditioning or air cooling systems, not used to remove air contaminants from specific equipment.

(47) Natural draft hoods, natural draft stacks, or natural draft ventilators for sanitary and storm drains, safety valves, and storage tanks subject to size and service limitations expressed elsewhere in this section.

(48) Natural and forced air vents and stacks for bathroom/toilet facilities.

(49) Office activities.

(50) Personal care activities.

(51) Sampling connections used exclusively to withdraw materials for laboratory analyses and testing.

(52) Fire fighting and similar safety equipment and equipment used to train fire fighters excluding fire drill pits.

(53) Materials and equipment used by, and activity related to operation of infirmary; infirmary is not the source's business activity.

(54) Fuel and exhaust emissions from vehicles in parking lots.

(55) Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, sintering or polishing: Ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood provided that:

(a) Activity is performed indoors;

(b) Particulate emission control in the immediate vicinity of the activity;

(c) Exhaust from the particulate control is within the building housing the activity;

(d) No fugitive particulate emissions enter the environment.

(56) Oxygen, nitrogen, or rare gas extraction and liquefaction equipment subject to other exemption limitation, e.g., internal and external combustion equipment.

(57) Slaughterhouse equipment except rendering cookers.

(58) Ozonation equipment.

(59) Nonasbestos brake shoe bonding.

(60) Batch loading and unloading of solid phase catalysts.

(61) Demineralization and oxygen scavenging (deaeration) of water.

(62) Pulse capacitors.

(63) Laser trimmers, using dust collection to prevent fugitive emissions.

(64) Plasma etcher, using dust collection to prevent fugitive emissions and using only oxygen, nitrogen, carbon dioxide, or inert gas.

(65) Gas cabinets using only gasses that are not regulated air pollutants.

(66) CO_2 lasers, used only on metals and other materials which do not emit HAPs in the process.

(67) Structural changes not having air contaminant emissions.

(68) Confection cooking equipment.

(69) Mixing, packaging, storage and handling activities of any size, limited to soaps, lubricants, vegetable oil, grease, animal fat, aqueous salt solutions.

(70) Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy, e.g., blueprint activity, photocopiers, mimeograph, telefax, photographic developing, and microfiche.

(71) Pharmaceutical and cosmetics packaging equipment.

(72) Paper trimmers/binders.

(73) Sample gathering, preparation and management.

(74) Repair and maintenance activities, not involving installation of an emission unit and not increasing potential emissions of a regulated air pollutant.

(75) Handling equipment and associated activities for glass and aluminum which is destined for recycling, not the re-refining process itself.

(76) Hydraulic and hydrostatic testing equipment.

(77) Batteries and battery charging.

(78) Porcelain and vitreous enameling equipment.

(79) Solid waste (as defined in the Washington Administrative Code) containers.

(80) Salt baths using nonvolatile salts and not used in operations which result in air emissions.

(81) Shock chambers.

(82) Wire strippers.

(83) Humidity chambers.

(84) Solar simulators.

(85) Environmental chambers not using hazardous air pollutant (HAPs) gasses.

(86) Totally enclosed conveyors.

(87) Steam vents and safety relief valves.

(88) Air compressors, pneumatically operated equipment, systems and hand tools.

(89) Steam leaks.

(90) Recovery boiler blow-down tank.

(91) Salt cake mix tanks.

(92) Continuous digester chip feeders.

(93) Weak liquor and filter tanks.

(94) Process water and white water storage tanks.

(95) Demineralizer tanks.

(96) Clean condensate tanks.

(97) Alum tanks.

(98) Broke beaters, repulpers, pulp and repulping tanks, stock chests and pulp handling.

(99) Lime mud filtrate tank.

(100) Hydrogen peroxide tanks.

(101) Lime mud water.

(102) Lime mud filter.

(103) Liquor clarifiers and storage tanks and associated pumping, piping and handling.

(104) Lime grits washers, filters and handling.

(105) Lime silos and feed bins.

(106) Paper forming.

(107) Dryers (Yankee, after dryer, curing systems and coolings systems).

(108) Vacuum systems exhausts.

(109) Starch cooking.

(110) Stock cleaning and pressurized pulp washing.

(111) Winders.

(112) Chipping.

(113) Debarking.

(114) Sludge dewatering and handling.

(115) Screw press vents.

(116) Pond dredging.

(117) Polymer tanks and storage devices and associated pumping and handling equipment, used for solids dewatering and flocculation.

(118) NonPCB oil filled circuit breakers, oil filled transformers and other equipment that is analogous to, but not considered to be, a tank.

(119) Electric or steam-heated drying ovens and autoclaves.

(120) Sewer manholes, junction boxes, sumps and lift stations associated with wastewater treatment systems.

(121) Water cooling towers processing exclusively non-contact cooling water.

[Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-532, filed 5/17/94, effective 6/17/94.]

WAC 173-401-533 Units and activities defined as insignificant on the basis of size or production rate. (1) General. This section contains lists of units or activities that are exempt from this chapter on the basis of size or production rate. Units and activities listed in this section must be listed on the permit application.

(2) The following units and activities are determined to be insignificant based on their size or production rate:

(a) Operation, loading and unloading of storage tanks and storage vessels, with lids or other appropriate closure and less than two hundred sixty gallon capacity (35 cft), heated only to the minimum extent to avoid solidification if necessary.

(b) Operation, loading and unloading of storage tanks, not greater than one thousand one hundred gallon capacity, with lids or other appropriate closure, not for use with hazardous air pollutants (HAPs), maximum (max.) vp 550mm Hg.

(c) Operation, loading and unloading of VOC storage tanks (including gasoline storage tanks), ten thousand gallons capacity or less, with lids or other appropriate closure, vp not greater than 80mm Hg at 21°C.

(d) Operation, loading and unloading storage of butane, propane, or liquified petroleum gas (LPG), storage tanks, vessel capacity under forty thousand gallons.

(e) Combustion source less than five million Btu/hr. exclusively using natural gas, butane, propane and/or LPG.

(f) Combustion source, less than five hundred thousand Btu/hr., using any commercial fuel containing less than 0.4% by weight sulfur for coal or less than 1% by weight sulfur for other fuels.

(g) Combustion source, of less than one million Btu/hr. if using kerosene, No. 1 or No. 2 fuel oil.

(h) Combustion source, not greater than five hundred thousand Btu/hr. if burning used oil and not greater than four hundred thousand Btu/hr. if burning waste wood or waste paper.

(i) Welding using not more than one ton per day of welding rod.

(j) Foundry sand molds, unheated and using binders with less than 0.25% free phenol by sand weight.

(k) "Parylene" coaters using less than five hundred gallons of coating per year.

(l) Printing and silkscreening, using less than two gallon/day of any combination of the following: Inks, coatings, adhesives, fountain solutions, thinners, retarders, or nonaqueous cleaning solutions.

(m) Water cooling towers and ponds, not using chromium-based corrosion inhibitors, not used with barometric jets or condensers, not greater than ten thousand gpm, not in direct contact with gaseous or liquid process streams containing regulated air pollutants.

(n) Combustion turbines, of less than 500 HP.

(o) Batch solvent distillation, not greater than fifty-five gallons batch capacity.

(p) Municipal and industrial water chlorination facilities of not greater than twenty million gallons per day capacity. The exemption does not apply to waste water treatment.

(q) Surface coating, using less than two gallons per day.

(r) Space heaters and hot water heaters using natural gas, propane or kerosene and generating less than five million Btu/hr.

(s) Tanks, vessels, and pumping equipment, with lids or other appropriate closure for storage or dispensing of aqueous solutions of inorganic salts, bases and acids excluding:

(i) 99% or greater H_2SO_4 or H_3PO_4

(ii) 70% or greater HNO_3

(iii) 30% or greater HCl

(iv) More than one liquid phase where the top phase is more than one percent VOCs.

(t) Equipment used exclusively to pump, load, unload or store high boiling organic material, material with initial boiling point (IBP) not less than 150°C. or vapor pressure (vp) not more than 5mm Hg at 21°C. with lids or other appropriate closure.

(u) Smokehouses under twenty square feet.

(v) Milling and grinding activities, using paste-form compounds with less than one percent VOCs.

(w) Rolling, forging, drawing, stamping, shearing, or spinning hot or cold metals.

(x) Dip-coating operations, using materials with less than one percent VOCs.

(y) Surface coating, aqueous solution or suspension containing less than one percent VOCs.

(z) Cleaning and stripping activities and equipment, using solutions having less than one percent VOCs by weight. On metallic substrates, acid solutions are not considered for listing as insignificant.

(aa) Storage and handling of water based lubricants for metal working where the organic content of the lubricant is less than ten percent.

(bb) Municipal and industrial waste water chlorination facilities of not greater than one million gallons per day capacity.

(3) The following units or activities may be determined to be insignificant on a case-by-case basis by the permitting authority:

(a) Pilot plants.

(b) Cold feed aggregate bins for asphalt and concrete production equipment.

(c) Chemical or physical analytical laboratory operations or equipment including fume hoods and vacuum pumps.

(d) NPDES permitted ponds and lagoons utilized solely for the purpose of settling suspended solids and skimming of oil and grease.

(e) Coffee roasters, under fifteen lbs./day of coffee.

(f) Tire buffing of less than six thousand six hundred tires per year.

[Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-533, filed 5/17/94, effective 6/17/94.]

PART VI
PERMIT CONTENT

WAC 173-401-600 Permit content. (1) Each permit shall contain terms and conditions that assure compliance with all applicable requirements at the time of permit issuance. Every requirement in an operating permit shall be based upon the most stringent of the following requirements:

(a) The FCAA and rules implementing that act, including provisions of the approved state implementation plan;

(b) Chapter 70.94 RCW and rules implementing that chapter. This includes requirements in regulatory orders issued by the permitting authority;

(c) In permits issued by a local air pollution control authority, the requirements of any order or regulation adopted by that authority;

(d) Chapter 70.98 RCW and rules adopted thereunder; and

(e) Chapter 80.50 RCW and rules adopted thereunder.

(2) Legal authority. The permit shall specify and reference the origin of and authority for each term or condition, and identify any difference in form as compared to the applicable requirement upon which the term or condition is based.

(3) Acid rain. Where an applicable requirement of the FCAA is more stringent than an applicable requirement of regulations promulgated under Title IV of the FCAA, both provisions shall be incorporated into the permit and shall be enforceable by the administrator.

(4) Where an applicable requirement based on the FCAA and rules implementing that act (including the approved state implementation plan) is less stringent than an applicable requirement promulgated under state or local legal authority, both provisions shall be incorporated into the permit in accordance with WAC 173-401-625.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-600, filed 10/4/93, effective 11/4/93.]

WAC 173-401-605 Emission standards and limitations. (1) General. Each permit shall contain emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance.

(2) Alternative emission limits. If the Washington state implementation plan allows a determination of an alternative emission limit at a chapter 401 source, equivalent to that contained in the plan, to be made in the permit issuance, renewal, or significant modification process, the permitting authority may elect to use such process. Any permit containing such equivalency determination shall contain provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.

(3) Reasonably available control technology (RACT). Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance or renewal shall be considered RACT for purposes of permit issuance or renewal. RACT determinations under section 8, chapter 252, Laws of 1993, shall be incorporated into an operating permit as provided in WAC 173-401-730.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-605, filed 10/4/93, effective 11/4/93.]

WAC 173-401-610 Permit duration. The permitting authority shall issue permits for a fixed term of five years.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-610, filed 10/4/93, effective 11/4/93.]

WAC 173-401-615 Monitoring and related recordkeeping and reporting requirements. (1) Monitoring. Each permit shall contain the following requirements with respect to monitoring:

(a) All emissions monitoring and analysis procedures or test methods required under the applicable requirements, including any procedures and methods promulgated pursuant to sections 504(b) or 114 (a)(3) of the FCAA;

(b) Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to subsection (3) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this paragraph; and

(c) As necessary, requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods.

(2) Recordkeeping. With respect to recordkeeping, the permit shall incorporate all applicable recordkeeping requirements and require, where applicable, the following:

(a) Records of required monitoring information that include the following:

(i) The date, place as defined in the permit, and time of sampling or measurements;

(ii) The date(s) analyses were performed;

(iii) The company or entity that performed the analyses;

(iv) The analytical techniques or methods used;

(v) The results of such analyses; and

(vi) The operating conditions existing at the time of sampling or measurement;

(b) A record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

(c) Retention of records of all required monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(3) Reporting. With respect to reporting, the permit shall incorporate all applicable reporting requirements and require the following:

(a) Submittal of reports of any required monitoring at least once every six months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with WAC 173-401-520.

(b) Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. The permitting authority shall define "prompt" in each individual permit in relation to the degree and type of deviation likely to occur and the applicable requirement. For deviations which represent a potential threat to human health or safety, "prompt" means as soon as possible, but in no case later than twelve hours after the deviation is discovered. The source shall maintain a contemporaneous record of all deviations. Other deviations shall be reported no later than thirty days after the end of the month during which the deviation is discovered.

(4) Compliance assurance monitoring. 40 CFR Part 64, in effect on July 1, 2000, is adopted by reference.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-615, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-401-615, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-615, filed 10/4/93, effective 11/4/93.]

WAC 173-401-620 Standard terms and conditions. (1) Acid rain. Each permit for an affected source shall contain a condition prohibiting emissions exceeding any allowances that the source lawfully holds under Title IV of the FCAA or the regulations promulgated thereunder.

(a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement.

(b) No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

(c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the FCAA and in effect on April 7, 1993.

(2) Standard provisions. Each permit shall include the following standard provisions:

(a) Duty to comply. The permittee must comply with all conditions of this chapter 401 permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(b) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) Permit actions. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(d) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

(e) Duty to provide information. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205.

(f) Permit fees. The permittee shall pay fees as a condition of this permit in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW.

(g) Emissions trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(h) Severability. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

(i) Permit appeals. This permit or any conditions in it may be appealed only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA.

(j) Permit continuation. This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-620, filed 10/4/93, effective 11/4/93.]

WAC 173-401-625 Federally enforceable requirements. (1) Federal enforceability. All terms and conditions in

a chapter 401 permit, including any provisions designed to limit a source's potential to emit, are enforceable by the administrator and citizens under the FCAA.

(2) Exceptions. Notwithstanding subsection (1) of this section, the permitting authority shall specifically designate as not being federally enforceable under the FCAA any terms and conditions included in the permit that are not required under the FCAA or under any of its applicable requirements. Terms and conditions so designated are not subject to the EPA and affected states review requirements of WAC 173-401-700 through 173-401-820.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-625, filed 10/4/93, effective 11/4/93.]

WAC 173-401-630 Compliance requirements. (1) General. Consistent with WAC 173-401-615, all chapter 401 permits shall contain compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. Any document (including reports) required by a chapter 401 permit shall contain a certification by a responsible official that meets the requirements of WAC 173-401-520.

(2) Inspection and entry. Each permit shall contain inspection and entry requirements that require, that upon presentation of credentials and other documents as may be required by law, the permittee shall allow the permitting authority or an authorized representative to perform the following:

(a) Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is 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 air pollution control equipment), practices, or operations regulated or required under the permit; and

(d) As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(3) Schedule of compliance. Each permit shall contain a schedule of compliance consistent with WAC 173-401-510 (2)(h)(iii).

(4) Progress reports. For those sources required to have a schedule of compliance, the permit shall require progress reports consistent with an applicable schedule of compliance and WAC 173-401-510 (2)(h) to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by the permitting authority. Such progress reports shall contain the following:

(a) Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones, or compliance were achieved; and

(b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

(5) Compliance certification. Each permit shall contain requirements for compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. Permits shall include each of the following:

(a) A requirement that compliance certifications be submitted once per year. Permitting authorities may require that compliance certifications be submitted more frequently for those emission units not in compliance with permit terms and conditions or where more frequent certification is specified in the applicable requirement;

(b) In accordance with WAC 173-401-615(1), a means for monitoring the compliance of the source with its emissions limitations, standards, and work practices;

(c) A requirement that the compliance certification include the following:

(i) The identification of each term or condition of the permit that is the basis of the certification;

(ii) The compliance status;

(iii) Whether compliance was continuous or intermittent;

(iv) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615 (3)(a); and

(v) Such other facts as the authority may require to determine the compliance status of the source.

(d) A requirement that all compliance certifications be submitted to the administrator as well as to the permitting authority; and

(e) Such additional requirements as may be specified pursuant to sections 114 (a)(3) and 504(b) of the FCAA.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-630, filed 10/4/93, effective 11/4/93.]

WAC 173-401-635 Temporary sources. The permitting authority may issue a single permit authorizing emissions from similar operations by the same source owner or operator at multiple temporary locations. The operation must be temporary and involve at least one change of location during the term of the permit. No affected source shall be permitted as a temporary source. Permits for temporary sources shall include the following:

(1) Conditions that will assure compliance with all applicable requirements at all authorized locations;

(2) Requirements that the owner or operator notify the permitting authority at least ten days in advance of each change in location; and

(3) Conditions that assure compliance with all other provisions in WAC 173-401-600 through 173-401-650.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-635, filed 10/4/93, effective 11/4/93.]

WAC 173-401-640 Permit shield. (1) Shield requirement. Each chapter 401 permit shall include a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit.

(2) Inapplicable requirements. Upon request, the permitting authority shall include in the permit or in a separate writ-

ten finding issued with the permit a determination identifying specific requirements that do not apply to the source. The source shall specify in its application for such a determination the requirements as to which the determination is requested. If the determination is issued in a separate finding, that finding shall be summarized in the permit. The permit shall state that the permit shield applies to any requirements so identified. A request to extend the permit shield to requirements deemed inapplicable to the source may be made either in the original permit application or in an application for a permit modification.

(3) Omissions. A chapter 401 permit that does not expressly state that a permit shield extends to specific applicable requirements shall be presumed not to provide such a shield for those requirements.

(4) Exclusions. Nothing in this section or in any chapter 401 permit shall alter or affect the following:

(a) The provisions of section 303 of the FCAA (emergency orders), including the authority of the administrator under that section;

(b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

(c) The applicable requirements of the acid rain program, consistent with section 408(a) of the FCAA;

(d) The ability of EPA to obtain information from a source pursuant to section 114 of the FCAA; or

(e) The ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in chapter 252, Laws of 1993.

(5) The agency may exclude all or a portion of a permit from the permit shield upon a finding that the shield would substantially impede implementation or enforcement of applicable requirements. Such a finding shall identify the portions of the permit excluded from the shield, the requirements that have led to the exclusion, and the reason for the exclusion.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-640, filed 10/4/93, effective 11/4/93.]

WAC 173-401-645 Emergency provision. (1) Definition. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(2) Effect of an emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of subsection (3) of this section are met.

(3) Criteria. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(a) An emergency occurred and that the permittee can identify the cause(s) of the emergency;

(b) The permitted facility was at the time being properly operated;

(c) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(d) The permittee submitted notice of the emergency to the permitting authority within two working days of the time when emission limitations were exceeded due to the emergency or shorter periods of time specified in an applicable requirement. This notice fulfills the requirement of WAC 173-401-615 (3)(b) unless the excess emissions represent a potential threat to human health or safety. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(4) Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(5) Relationship to other rules. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-645, filed 10/4/93, effective 11/4/93.]

WAC 173-401-650 Operational flexibility. (1) Reasonably anticipated operating scenarios. Each permit shall contain terms and conditions for reasonably anticipated operating scenarios identified by the source in its application as approved by the permitting authority. Such terms and conditions:

(a) Shall require the source, contemporaneously with making a change from one operating scenario to another, to record in a log at the permitted facility a record of the scenario under which it is operating;

(b) Shall extend the permit shield described in WAC 173-401-640 to all terms and conditions under each such operating scenario; and

(c) Shall ensure that the terms and conditions of each such alternative scenario meet all applicable requirements and the requirements of this chapter.

(2) Emissions trading. Each permit shall contain terms and conditions, if the permit applicant requests them, for the trading of emissions increases and decreases in the permitted facility, to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval of each emissions trade. Such terms and conditions:

(a) Shall include all terms required under WAC 173-401-600 through 173-401-630 to determine compliance;

(b) Shall extend the permit shield described in WAC 173-401-640 to all terms and conditions that allow such increases and decreases in emissions;

(c) Shall meet all applicable requirements and requirements of this chapter; and

(d) Shall require the source, contemporaneously with making a change, to record in a log at the permitted source the emission increases and decreases.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-650, filed 10/4/93, effective 11/4/93.]

PART VII
PERMIT ISSUANCE, RENEWAL, REOPENINGS, AND REVISIONS

WAC 173-401-700 Action on application. (1) A permit, permit modification, or renewal may be issued only if all of the following conditions have been met:

(a) The permitting authority has received a complete application for a permit, permit modification, or permit renewal, except that a complete application need not be received before issuance of a general permit under WAC 173-401-750;

(b) The permit has been reviewed and signed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority and, in the latter case, signed, dated, and stamped by the supervising professional engineer;

(c) The permitting authority has complied with the requirements for public participation under WAC 173-401-800;

(d) The permitting authority has complied with the requirements for notifying and responding to affected states under WAC 173-401-820;

(e) The conditions of the permit provide for compliance with all applicable requirements and the requirements of this chapter;

(f) The administrator has received a copy of the proposed permit and any notices required under WAC 173-401-810 and 173-401-820, and has not objected in writing to issuance of the permit within forty-five days of receipt of the proposed permit and all necessary supporting information; and

(g) Where EPA has objected to issuance of a permit or modification, the permittee has consented in writing to the changes required by the EPA.

(2) Deadlines. Except as provided in subsections (1)(g), (3), and (4) of this section or under regulations promulgated under Title IV or Title V of the FCAA for the permitting of affected sources under the acid rain program, the permitting authority shall take final action on each permit application (including a request for permit modification or renewal) within eighteen months of receiving a complete application.

(3) Transition plan. The permitting authority shall take final action on at least one-third of all operating permit applications received from chapter 401 sources in existence on the date on which EPA authorizes the permitting authority to issue operating permits within one year after EPA authorization. Final action shall be taken on at least one third of such applications annually over a period not to exceed three years after the effective date of EPA authorization.

(4) Early reduction submittals. The permitting authority shall take final action on a complete permit application containing an early reduction demonstration under section 112 (i)(5) of the FCAA within nine months of receiving the complete application.

(5) Notice of construction applications. Except as provided in WAC 173-401-500(10) processing of notice of construction applications received under RCW 70.94.152 shall take priority over processing of operating permit applications.

(6) Completeness. The permitting authority shall promptly provide notice to the applicant of whether the application is complete. Unless the permitting authority requests additional information or otherwise notifies the applicant of incompleteness within sixty days of receipt of an application, the application shall be deemed complete. For modifications processed through minor permit modification procedures, such as those in WAC 173-401-725 (2)(a) and (3), the permitting authority does not have to provide a completeness determination.

(7) Draft permit. Within one hundred eighty days of the date upon which an application is deemed to be complete, the permitting authority should generally issue either a draft permit or a notice of intent to deny the permit application. Notice of issuance of a draft permit shall be published and provided to affected states in accordance with the procedures in WAC 173-401-800 through 173-401-820. The deadline provided in this subsection shall not apply to the initial round of permit applications filed pursuant to subsection (3) of this section.

(8) Statement of basis. At the time the draft permit is issued, the permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions). The permitting authority shall send this statement to EPA, the applicant, and to any other person who requests it.

(9) Proposed permit. Upon completion of the public comment period provided in WAC 173-401-800, the permitting authority shall issue a proposed permit, along with a response to any comments received during the comment period. The permitting authority shall transmit the proposed permit and its response to any comments to the applicant and to EPA for review, as provided in WAC 173-401-810.

(10) Preconstruction approval. The submittal of a complete application shall not affect any requirement of a source to have a preconstruction permit under Title I of the FCAA or a notice of construction approval under RCW 70.94.152.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-700, filed 10/4/93, effective 11/4/93.]

WAC 173-401-705 Requirement for a permit. (1) Requirement for a permit. Except as provided in subsection (2) of this section, WAC 173-401-722 and 173-401-725, no chapter 401 source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under this chapter.

(2) Application shield. If a chapter 401 source submits a complete application for permit issuance (including for renewal) within twelve months of the time the source becomes subject to the permit program, operation of the source without a chapter 401 permit is not a violation of this chapter until the permitting authority takes final action on the permit application, except as noted in this section. Chapter 401 sources in existence on the date of EPA approval of the state permit program shall become subject to the program on the effective date of EPA approval. This protection shall cease to apply if, subsequent to the completeness determination made pursuant to WAC 173-401-700(6), the applicant

fails to submit by the deadline specified in writing by the permitting authority any additional information identified as being needed to process the application.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-705, filed 10/4/93, effective 11/4/93.]

WAC 173-401-710 Permit renewal, revocation and expiration. (1) Renewal application. The source shall submit a complete permit renewal application to the permitting authority no later than the date established in the permit. This date shall be no less than six months prior to the expiration of the permit. The permitting authority may require that a permit renewal application must be submitted earlier. The permitting agency must mail this written notice to the source at least one year before the new application deadline to ensure that the terms of the permit will not lapse before the permit is renewed. In no event shall the application due date be earlier than eighteen months prior to the expiration of the permit. The permitting authority shall send a permit application to each source at least six months before a complete application is due.

(2) Permit issuance. Permits being renewed are subject to the same procedural requirements, including those for public participation, affected state and EPA review, that apply to initial permit issuance.

(3) Expired permits. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with subsection (1) of this section and WAC 173-401-500. All terms and conditions of the permit shall remain in effect after the permit itself expires if a timely and complete permit application has been submitted.

(4) Revocation of permits. The permitting authority may revoke a permit only upon the request of the permittee or for cause. The permitting authority shall provide at least thirty days written notice to the holder of a current operating permit prior to revocation of the permit or denial of a permit renewal application. Such notice shall include an explanation of the basis for the proposed action and afford the permittee/applicant an opportunity to meet with the permitting authority prior to the authority's final decision. A revocation issued under this section may be issued conditionally with a future effective date and may specify that the revocation will not take effect if the permittee satisfies the specified conditions before the effective date. Nothing in this subsection shall limit the permitting authority's authority to issue emergency orders.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-710, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-710, filed 10/4/93, effective 11/4/93.]

WAC 173-401-720 Administrative permit amendments. (1) Definition. An "administrative permit amendment" is a permit revision that:

(a) Corrects typographical errors;

(b) Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;

(c) Requires more frequent monitoring or reporting by the permittee;

(d) Allows for a change in ownership or operational control of a source where the permitting authority determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the permitting authority;

(e) Incorporates into the chapter 401 permit the terms, conditions, and provisions from orders approving notice of construction applications processed under an EPA-approved program, provided that such a program meets procedural requirements substantially equivalent to the requirements of WAC 173-401-700, 173-401-725, and 173-401-800 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in WAC 173-401-600 through 173-401-650.

(2) Acid rain provisions. Administrative permit amendments for purposes of the acid rain portion of the permit shall be governed by regulations promulgated under Title IV of the FCAA and in effect on April 7, 1993.

(3) Administrative permit amendment procedures. An administrative permit amendment may be made by the permitting authority consistent with the following:

(a) The permitting authority shall take no more than sixty days from receipt of a request for an administrative permit amendment to take final action on such request, and may incorporate such changes without providing notice to the public or affected states provided that it designates any such permit revisions as having been made pursuant to this paragraph.

(b) The permitting authority shall submit a copy of the revised permit to the administrator.

(c) The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

(4) Permit shield. The permitting authority shall, upon taking final action granting a request for an administrative permit amendment, allow coverage by the permit shield in WAC 173-401-640 for administrative permit amendments made pursuant to subsection (1)(e) of this section.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-720, filed 10/4/93, effective 11/4/93.]

WAC 173-401-722 Changes not requiring permit revisions. (1) General.

(a) A chapter 401 source is authorized to make the changes described in this section without a permit revision, providing the following conditions are met:

(i) The proposed changes are not Title I modifications;

(ii) The proposed changes do not result in emissions which exceed those allowable under the permit, whether expressed as a rate of emissions, or in total emissions;

(iii) The proposed changes do not alter permit terms that are necessary to enforce limitations on emissions from units covered by the permit; and

(iv) The facility provides the administrator and the permitting authority with written notification at least seven days

prior to making the proposed changes except that written notification of a change made in response to an emergency shall be provided as soon as possible after the event.

(b) Permit attachments. The source and permitting authority shall attach each notice to their copy of the relevant permit.

(2) Section 502 (b)(10) changes. Pursuant to the conditions in subsection (1) of this section, a chapter 401 source is authorized to make section 502 (b)(10) changes (as defined in WAC 173-401-200) without a permit revision.

(a) For each such change, the written notification required under subsection (1)(a)(iv) of this section shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield authorized under WAC 173-401-640 shall not apply to any change made pursuant to this paragraph.

(3) SIP authorized emissions trading. Pursuant to the conditions in subsection (1) of this section, a chapter 401 source is authorized to trade increases and decreases in emissions in the permitted facility, where the Washington state implementation plan provides for such emissions trades without requiring a permit revision. This provision is available in those cases where the permit does not already provide for such emissions trading.

(a) Under this subsection (3), the written notification required under subsection (1)(a)(iv) of this section shall include such information as may be required by the provision in the Washington state implementation plan authorizing the emissions trade, including at a minimum, when the proposed change will occur, a description of each such change, any change in emissions, the permit requirements with which the source will comply using the emissions trading provisions of the Washington state implementation plan, and the pollutants emitted subject to the emissions trade. The notice shall also refer to the provisions with which the source will comply in the applicable implementation plan and that provide for the emissions trade.

(b) The permit shield described in WAC 173-401-640 shall not extend to any change made under this paragraph. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the applicable implementation plan authorizing the emissions trade.

(4) Emission caps. Upon the request of the permit applicant, the permitting authority shall issue permits that contain terms and conditions, including all terms required under WAC 173-401-600 through 173-401-630 to determine compliance, allowing for the trading of emissions increases and decreases in the chapter 401 source solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The emissions trading provisions shall not be applied to any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements.

(a) Under this paragraph, the written notification required under subsection (1)(a)(iv) of this section shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.

(b) The permit shield described in WAC 173-401-640 shall extend to terms and conditions that allow such increases and decreases in emissions.

(5) A source making a change under this section shall comply with applicable preconstruction review requirements established pursuant to RCW 70.94.152.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-722, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-722, filed 10/4/93, effective 11/4/93.]

WAC 173-401-724 Off-permit changes. (1) The source shall be allowed to make changes not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided that the proposed changes do not weaken the enforceability of existing permit conditions. Any change that is a Title I modification or is a change subject to the acid rain requirements under Title IV of the FCAA must be submitted as a permit revision.

(2) Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition.

(3) Sources must provide contemporaneous written notice to the permitting authority and EPA of each such change, except for changes that qualify as insignificant under Appendix A of this chapter. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

(4) The change shall not qualify for the permit shield under WAC 173-401-640.

(5) The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

(6) A source making a change under this section shall comply with applicable preconstruction review requirements established pursuant to RCW 70.94.152.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-724, filed 10/4/93, effective 11/4/93.]

WAC 173-401-725 Permit modification. (1) Definition. A permit modification is any revision to a chapter 401 permit that cannot be accomplished under provisions for administrative permit amendments under WAC 173-401-720. A permit modification for purposes of the acid rain portion of the permit shall be governed by regulations promulgated under Title IV of the FCAA and in effect on April 7, 1993.

(2) Minor permit modification procedures.

(a) Criteria.

(i) Minor permit modification procedures shall be used for those permit modifications that:

(A) Do not violate any applicable requirement;

(B) Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

(C) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

(D) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

(I) A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the FCAA; and

(II) An alternative emissions limit approved pursuant to regulations promulgated under section 112 (i)(5) of the FCAA;

(E) Are not modifications under any provision of Title I of the FCAA;

(ii) Notwithstanding (a)(i) of this subsection, and subsection (3)(a) of this section, the permitting authority may allow the use of minor permit modification procedures for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that the use of such minor permit modification procedures are explicitly provided for in the Washington state implementation plan or in applicable requirements promulgated by EPA and in effect on April 7, 1993.

(b) Application. An application requesting the use of minor permit modification procedures shall meet the requirements of WAC 173-401-510 and shall include the following:

(i) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

(ii) The source's suggested draft permit;

(iii) Certification by a responsible official, consistent with WAC 173-401-520, of the truth, accuracy, and completeness of the application and that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

(iv) Completed forms for the permitting authority to use to notify the administrator and affected states as required under WAC 173-401-810 and 173-401-820.

(c) EPA and affected state notification. Within five working days of receipt of a complete permit modification application, the permitting authority shall meet its obligation under WAC 173-401-810 and 173-401-820 to notify the administrator and affected states of the requested permit modification. The permitting authority promptly shall send any notice required under WAC 173-401-820(2) to the administrator.

(d) Notice requirements. Concurrent with the notice to the administrator and affected states, the permitting authority shall submit to the permit register notice of each proposed minor permit modification. Publication in the next available issue of the permit register will signal the beginning of a public comment period of twenty-one days. Each notice must describe the proposed revisions and specify the deadline to file comments with the permitting authority on the proposed modification.

(e) Timetable for issuance. The permitting authority may not issue a final permit modification until after the public comment period ends. The permitting authority may not issue a final permit modification until after EPA's forty-five day review period or until EPA has notified the permitting authority that EPA will not object to issuance of the permit modification, whichever is first, although the permitting authority can approve the permit modification prior to that time. Within ninety days of the permitting authority's receipt of an application under minor permit modification procedures or fifteen days after the end of the administrator's forty-five day review period under WAC 173-401-810, whichever is later, the permitting authority shall:

(i) Issue the permit modification as proposed;

(ii) Deny the permit modification application;

(iii) Determine that the requested modification does not meet the minor permit modification criteria and should be reviewed under the significant modification procedures; or

(iv) Revise the draft permit modification and transmit to the administrator the new proposed permit modification as required by WAC 173-401-810.

(f) Source's ability to make change. The source may make the change proposed in its minor permit modification application immediately after it files such application provided that those changes requiring the submissions of a notice of construction application have been reviewed and approved by the permitting authority. After the source makes the change allowed by the preceding sentence, and until the permitting authority takes any of the actions specified in (d) of this subsection, the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.

(g) Permit shield. The permit shield under WAC 173-401-640 shall not extend to minor permit modifications.

(3) Group processing of minor permit modifications. Consistent with this subsection, the permitting authority may process groups of a source's applications for certain modifications eligible for minor permit modification processing.

(a) Criteria. Group processing of modifications may be used only for those permit modifications:

(i) That meet the criteria for minor permit modification procedures under subsection (2)(a) of this section; and

(ii) That collectively are below ten percent of the emissions allowed by the permit for the emissions unit for which the change is requested, twenty percent of the applicable definition of major source in WAC 173-401-200, or five tons per year, whichever is least.

(b) Application. An application requesting the use of group processing procedures shall meet the requirements of WAC 173-401-510 and shall include the following:

(i) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

(ii) The source's suggested draft permit;

(iii) Certification by a responsible official, consistent with WAC 173-401-520, of the truth, accuracy, and completeness of the application and that the proposed modification meets the criteria for use of group processing procedures and a request that such procedures be used;

(iv) A list of the source's other pending applications awaiting group processing, and a determination of whether the requested modification, aggregated with these other applications, equals or exceeds the threshold set under (a)(ii) of this subsection;

(v) Certification, consistent with WAC 173-401-520, that the source has notified EPA of the proposed modification. Such notification need only contain a brief description of the requested modification; and

(vi) Completed forms for the permitting authority to use to notify the administrator and affected states as required under WAC 173-401-810 and 173-401-820.

(c) EPA and affected state notification. On a quarterly basis or within five business days of receipt of an application demonstrating that the aggregate of a source's pending applications equals or exceeds the threshold level set under (a)(ii) of this subsection, whichever is earlier, the permitting authority promptly shall meet its obligation under paragraphs WAC 173-401-810 and 173-401-820 to notify the administrator and affected states of the requested permit modifications. The permitting authority shall send any notice required under WAC 173-401-820(2) to the administrator.

(d) Notice of requirements. Concurrent with the notice to the administrator and affected states, the permitting authority shall submit to the permit register notice of group processing of minor permit modifications. Publication in the next available issue of the permit register will signal the beginning of a public comment period of at least twenty-one days. Each notice must describe the proposed revisions and specify the deadline to file comments with the permitting authority on the proposed modification.

(e) Timetable for issuance. The provisions of subsection (2)(e) of this section shall apply to modifications eligible for group processing, except that the permitting authority shall take one of the actions specified in subsection (2)(e) of this section within one hundred eighty days of receipt of the application or fifteen days after the end of the administrator's forty-five day review period, whichever is later.

(f) Source's ability to make change. The provisions of subsection (2)(f) of this section shall apply to modifications eligible for group processing.

(g) Permit shield. The permit shield under WAC 173-401-640 shall not extend to minor permit modifications eligible for group processing.

(4) Significant modification procedures.

(a) Criteria. Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative permit amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing herein shall be construed to preclude the permittee from making changes consistent with this chapter that would render existing permit compliance terms and conditions irrelevant.

(b) Significant permit modifications shall meet all requirements of this chapter, including those for applications, public participation, review by affected states, and review by EPA, as they apply to permit issuance and permit renewal. The permitting authority shall complete review on the majority of significant permit modifications within nine months after receipt of a complete application.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-725, filed 10/4/93, effective 11/4/93.]

WAC 173-401-730 Reopening for cause. (1) Standard provisions. Each issued permit shall include provisions stating that the permit shall be reopened and revised under any of the following circumstances:

(a) Additional applicable requirements become applicable to a major chapter 401 source with a remaining permit term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620 (2)(j);

(b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;

(c) The permitting authority or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or

(d) The administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(2) Procedures. Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(3) Notice. Reopenings under this section shall not be initiated before a notice of such intent is provided to the chapter 401 source by the permitting authority at least thirty days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-730, filed 10/4/93, effective 11/4/93.]

WAC 173-401-735 Permit appeals. (1) A decision to issue or to deny a final permit, or the terms or conditions of such a permit, may be appealed to the pollution control hearings board under chapter 43.21B RCW and RCW 70.94.-161(9). Any appealable decision or determination shall be identified as such and shall contain a conspicuous notice to the recipient that it may be appealed by filing an appeal with

the pollution control hearings board and serving the appeal on the permitting authority within thirty days of receipt, pursuant to RCW 43.21B.310. The provision for appeal in this section is separate from and additional to any federal rights to petition and review under section 505(b) of the FCAA, including petitions filed pursuant to 40 CFR 70.8(c) and 70.8(d).

(2) Appealing parties. Parties that may file the appeal referenced in subsection (1) of this section include any person who participated in the public participation process pursuant to WAC 173-401-800.

(3) As provided in RCW 34.05.570, a person may seek a writ of mandamus in the event that a permitting authority fails to take final action on an application for a permit, permit renewal, or permit revision within the deadlines specified by WAC 173-401-700 through 173-401-725.

[Statutory Authority: RCW 70.94.161 (2)(a). 97-08-084 (Order 97-01), § 173-401-735, filed 4/2/97, effective 5/3/97. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-735, filed 10/4/93, effective 11/4/93.]

PART VIII
THE PERMIT PROCESS FOR GENERAL PERMITS

WAC 173-401-750 General permits. (1) Permit issuance. The permitting authority may, after notice and opportunity for public participation provided under WAC 173-401-800, issue a general permit covering numerous similar sources or emissions units. Any general permit shall comply with all requirements applicable to other chapter 401 permits and shall identify criteria by which sources may qualify for the general permit. To sources that qualify, the permitting authority shall grant the conditions and terms of the general permit. Notwithstanding the shield provisions of WAC 173-401-640, the source shall be subject to enforcement action for operation without a chapter 401 permit if the source is later determined not to qualify for the conditions and terms of the general permit. General permits shall not be authorized for affected sources under the acid rain program.

(2) Applications. Chapter 401 sources that would qualify for a general permit must apply to the permitting authority for coverage under the terms of the general permit or must apply for a chapter 401 permit consistent with WAC 173-401-500. The permitting authority may, in the general permit, provide for applications which deviate from the requirements of WAC 173-401-510, provided that such applications meet the requirements of this chapter, and include all information necessary to determine qualification for, and to assure compliance with, the general permit. Without repeating the public participation procedures required under WAC 173-401-800, the permitting authority may grant a source's request for authorization to operate under a general permit, but such a grant shall not be a final permit action for purposes of judicial review.

(3) Renewal. General permits being renewed are subject to the same procedural requirements, including public participation, that apply to initial permit issuance. If the general permit is renewed without change, sources covered by the general permit do not need to submit new applications to operate under the authority of the general permit.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-750, filed 10/4/93, effective 11/4/93.]

PART IX
PUBLIC INVOLVEMENT AND PERMIT REVIEW BY EPA AND AFFECTED STATES

WAC 173-401-800 Public involvement. (1) Purpose. It is ecology's and local air authorities' goal to ensure that accurate permitting information is made available to the public in a timely manner. The permitting authority is responsible for providing notice of permitting actions that allows sufficient time for comment and for providing enough information to inform the public of the extent of the actions proposed. These public involvement regulations establish a statewide process to be followed by all permitting authorities.

(2) Public notice.

(a) The permitting authority shall provide public notice for the following actions:

(i) Issuance of a draft permit or permit renewal;

(ii) Intended denial of a permit application;

(iii) Issuance of a draft permit modification;

(iv) Issuance of a draft general permit;

(v) Scheduling of a public hearing under subsection (4) of this section; and

(vi) Any other related activities that the permitting authority considers to involve substantial public interest.

(b) Public notice shall be provided by the permitting authority in the newspaper of largest general circulation in the area of the facility applying for a permit. Publication includes paid advertisement, legal notice, or other appropriate format, as determined by the permitting authority. The permitting authority may provide additional notice to the public through other methods, such as newsletters and press releases. Notice shall also be published in the *Ecology Permit Register*. The permitting authority shall send information on any action requiring publication in the *Permit Register* to ecology within three days of the action.

(c) Notice of the activities described in (a) of this subsection shall also be provided to persons requesting to receive such notice. The permitting authority shall maintain a mailing list of persons requesting notice, and may maintain more than one list, such as lists based on geographical location. No request shall require the extension of the comment period associated with the notice. The permitting authority may from time to time inform the public of the opportunity to be on the list and may also delete from the list persons who fail to respond to an inquiry of continued interest in receiving the notices.

(d) Public notice must include:

(i) Name and address of the permitting authority;

(ii) Name and address of the permit applicant, and if different, the name and address of the facility or activity regulated by the permit, unless it is a general permit;

(iii) A brief description of the business conducted at the facility and activity involved in the permit action;

(iv) Name, address, and telephone number of a person from whom interested persons may obtain further information such as copies of the draft permit, the application, and relevant supporting materials;

(v) A brief description of the comment procedures, including the procedures to request a hearing, and the time and place of any hearings scheduled for the permit; and

(vi) A description of the emission change involved in any permit modification.

(e) The permitting authority must make available for public inspection, in at least one location near the chapter 401 source, all nonproprietary information contained in the permit application, draft permit and supporting materials. Public inspections of materials for nonstationary sources or general permits may be located at the discretion of the permitting authority.

(3) Public comment. Except as otherwise provided in WAC 173-401-725, the permitting authority shall provide a minimum of thirty days for public comment on actions described in subsection (2)(a) of this section. This comment period begins on the date of publication of notice in the *Permit Register* or publication in the newspaper of largest general circulation in the area of the facility applying for the permit, whichever is later. No proposed permit shall be issued until the public comment period has ended and the permitting authority has prepared a response to the comments received.

(4) Public hearings. The applicant, any interested governmental entity, any group or any person may request a public hearing within the comment period required under subsection (3) of this section. Any such request shall indicate the interest of the entity filing it and why a hearing is warranted. The permitting authority may, in its discretion, hold a public hearing if it determines significant public interest exists. Any such hearing shall be held at a time(s) and place(s) as the permitting authority deems reasonable. The permitting authority shall provide at least thirty days prior notice of any hearing.

(5) The permitting authority shall keep a record of the commentors and issues raised during the public participation process. Such records shall be available to the public.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-800, filed 10/4/93, effective 11/4/93.]

WAC 173-401-805 Permit register. (1) Permit register. Ecology shall regularly publish and maintain a *Permit Register* that will be distributed to all interested parties that request to be on the mailing list. All permitting authorities will work to ensure the information published in the register is timely.

(2) Content. Besides the actions listed in WAC 173-401-800(2), the register will give notice of the following, as pertains to sources covered under this rule:

(a) Public meetings or hearings on a draft operating permit;

(b) Receipt of complete permit applications;

(c) Permit appeals to the pollution control hearings board;

(d) Issuance or denial of final permit, permit modifications, or renewals;

(e) Authorization for a source to operate without an operating permit by limiting its potential to emit to levels below those that would require the source to obtain an operating permit.

(f) Periodic summaries of enforcement order and changes made without revising the permit pursuant to WAC 173-401-722.

(3) Mailing list. Ecology shall periodically notify the public of the opportunity to be put on the mailing list for the permit register.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-805, filed 10/4/93, effective 11/4/93.]

WAC 173-401-810 EPA review. (1) Information transfer. The permitting authority shall provide to the administrator a copy of each permit application (including any application for permit modification), each proposed permit, and each final chapter 401 permit. The applicant may be required by the permitting authority to provide a copy of the permit application (including the compliance plan) directly to the administrator. Upon agreement with the administrator, the permitting authority may submit to the administrator a permit application summary form and any relevant portion of the permit application and compliance plan, in place of the complete permit application and compliance plan. To the extent practicable, the preceding information shall be provided in computer-readable format compatible with EPA's national data base management system.

(2) Records. Each permitting authority shall keep for five years such records and submit to the administrator such information as the administrator may reasonably require to ascertain whether the state program complies with the requirements of the FCAA or of 40 CFR part 70.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-810, filed 10/4/93, effective 11/4/93.]

WAC 173-401-820 Review by affected states. (1) Notice. The permitting authority shall give notice of each draft permit, permit revision, or permit renewal to any affected state on or before the time that the permitting authority provides this or permit revision notice to the public under WAC 173-401-800 and 173-401-805, except to the extent WAC 173-401-725 (2) or (3) requires the timing of the notice to be different.

(2) Response. The permitting authority, as part of the submittal of the proposed permit to the administrator (or as soon as possible after the submittal for minor permit modification procedures allowed under WAC 173-401-725 (2) and (3), shall notify the administrator and any affected state in writing of any refusal by the permitting authority to accept all recommendations for the proposed permit that the affected state submitted during the public or affected state review period. The notice shall include the permitting authority's reasons for not accepting any such recommendation. The permitting authority is not required to accept recommendations that are not based on applicable requirements or the requirements of this chapter.

(3) British Columbia notification. The permitting authority shall notify British Columbia of draft permits, permit revisions, or permit renewals at sources located within 100 kilometers of the Washington-British Columbia border. Such notice shall be concurrent with notification of EPA and affected states.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-820, filed 10/4/93, effective 11/4/93.]

PART X
FEE DETERMINATION AND CERTIFICATION

WAC 173-401-900 Fee determination—Ecology. (1) Fee determination. Ecology shall develop a fee schedule, consistent with the process outlined below, according to which it will collect fees from permit program sources under its jurisdiction. The fees shall be sufficient to cover ecology's permit administration costs and its share of ecology's development and oversight costs. The fee schedule shall also indicate the shares of ecology's development and oversight costs that are to be collected by each delegated local authority. Opportunities for public participation shall be afforded throughout the fee determination process, as provided in WAC 173-401-920(1).

(2) Fee eligible activities. The costs of the permit administration and development and oversight activities are fee eligible.

(a) Permit administration. Permit administration costs are those incurred by each permitting authority, including ecology, in administering and enforcing the operating permit program with respect to sources under its jurisdiction. Permit administration costs are those enumerated in WAC 173-401-940(1).

(b) Development and oversight. Development and oversight costs are those incurred by ecology in developing and administering the state operating permit program and in overseeing the administration of the program by the delegated local authorities. Development and oversight costs are those enumerated in WAC 173-401-940(2).

(3) Workload analysis. Ecology shall conduct a workload analysis projecting resource requirements, organized by categories of fee-eligible activities, for the purpose of preparing the budget. Ecology shall, for the two-year period corresponding to each biennium, identify the permit administration and development and oversight activities that it will perform during that biennium. The workload analysis shall include resource requirements for both the direct and indirect costs of the permit administration activities enumerated in WAC 173-401-940(1) and the development and oversight activities enumerated in WAC 173-401-940(2). Ecology shall publish a draft workload analysis together with the draft budget for the following biennium on or before February 28 of each even-numbered year and shall provide opportunity for public comment thereon in accordance with WAC 173-401-920(1). Ecology shall publish a final workload analysis together with the final budget for the following biennium on or before June 30 of each even-numbered year.

(4) Budget development. Ecology shall, for the two-year period corresponding to each biennium, prepare an operating permit program budget for that biennium. The budget shall be based on the resource requirements identified in the workload analysis for the biennium and shall take into account the projected operating permit program account balance at the start of the biennium. Ecology shall publish a draft budget for the following biennium together with the draft workload analysis on or before February 28 of each even-numbered year and shall provide opportunity for public comment thereon in accordance with WAC 173-401-920(1). The draft budget shall include data on unit costs (e.g., salary schedules and the indirect cost rate) used in preparing budget projections. Ecology shall publish a final budget together with the final workload analysis for the following biennium on or before June 30 of each even-numbered year.

(5) Allocation methodology.

(a) Development and oversight costs. Ecology shall allocate its development and oversight costs among all permitting authorities, including ecology, based upon the number of permit program sources under the jurisdiction of each permitting authority, except that extraordinary costs or other costs readily attributable to a specific permitting authority may be assessed by that authority.

(b) Permit administration costs and ecology's share of development and oversight costs. Ecology shall allocate its permit administration costs and its share of ecology's development and oversight costs among the permit program sources for whom it acts as permitting authority, according to a three-tiered structure based upon:

(i) The number of sources under its jurisdiction;

(ii) The complexity of the sources under its jurisdiction; and

(iii) The size of the sources under its jurisdiction, as measured by the quantity of each regulated pollutant (for fee calculation) emitted.

The complexity of each source shall be determined based on a ranking system under which ecology assigns to each source a complexity value of 1, 2 or 3, corresponding to ecology's assessment of the relative difficulty of issuing and maintaining an operating permit for that source. The quantity of each regulated pollutant emitted by a source shall be determined based on the annual emissions data during the most recent calendar year for which data is available. Each of the three tiers shall be equally weighted.

(c) WAC 173-401-300(7) Sources. Ecology shall allocate to permit program sources that qualify for an exemption pursuant to WAC 173-401-300(7) after the effective date of the date of the state operating permit program the portion of ecology's permit administration costs and ecology's share of its development and oversight costs that results from including such sources in the first tier of the allocation structure described in (b)(i) of this subsection. After federally enforceable limits have been established and for so long as a source continues to meet the requirements for exemption under WAC 173-401-300(7), that source shall pay registration program fees pursuant to RCW 70.94.015(2) in lieu of paying operating permit program fees.

(6) Fee schedule. Ecology shall issue annually a fee schedule reflecting the permit administration fee and the share of the development and oversight fee to be paid by each permit program source under its jurisdiction and reflecting the development and oversight assessment to be paid by each permitting authority. The fee schedule shall be based on the information contained in the final source data statements, as provided in WAC 173-401-925(3), for each year; the final source data statements shall be issued after opportunity for petition and review has been afforded in accordance with

WAC 173-401-925. Ecology shall publish the fee schedule for the following year on or before October 31 of each year.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-900, filed 12/30/93, effective 1/30/94.]

WAC 173-401-905 Fee determination—Delegated local authorities. Each delegated local authority shall establish a process for developing, assessing, and collecting fees from permit program sources under its jurisdiction. The fees shall be sufficient to cover its permit administration costs and its share of ecology's development and oversight costs. The fee determination process shall provide opportunity for public participation.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-905, filed 12/30/93, effective 1/30/94.]

WAC 173-401-910 General permit fee determination. Reserved.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-910, filed 12/30/93, effective 1/30/94.]

WAC 173-401-915 Fee collection—Ecology and delegated local authorities. (1) Collection from sources. Ecology and each delegated local authority shall collect fees sufficient to cover the costs of their respective permit administration activities and their share of ecology's development and oversight activities from the permit program sources under their respective jurisdictions.

(2) Dedicated account. All receipts from fees collected by or on behalf of ecology from permit program sources pursuant to RCW 70.94.162 shall be deposited in the air operating permit account created under RCW 70.94.015. All receipts from fees collected by delegated local authorities from permit program sources pursuant to RCW 70.94.162 shall be deposited in their respective air operating permit accounts or other accounts dedicated exclusively to support of the operating permit program.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-915, filed 12/30/93, effective 1/30/94.]

WAC 173-401-920 Accountability—Ecology and delegated local authorities. (1) Public participation during fee determination process. Ecology shall provide for public participation in the fee determination process described under WAC 173-401-900, which provision shall include but not be limited to the following:

(a) Ecology shall provide opportunity for public review of and comment on each biennial workload analysis and budget.

(b) Ecology shall publish in the *Permit Register* notice of issuance of its draft biennial workload analysis and draft biennial budget and issuance of its annual fee schedule.

(c) Ecology shall make available for public review, on or before February 28 of each even-numbered year, copies of its draft biennial workload analysis and draft biennial budget. Ecology shall make available for public review, on or before October 31 of each year, copies of its annual fee schedule. Ecology shall maintain a mailing list of persons requesting opportunity for review under this subsection or under WAC 173-401-925(1). Ecology may, from time to time, inform the public of the opportunity to be placed on the mailing list and may delete from the list persons who fail to respond to an inquiry regarding continued interest in receiving materials.

(d) Ecology shall provide at least sixty days for public comment on the draft biennial workload analysis and draft biennial budget. Such sixty-day period for comment shall run from the date ecology mails the draft workload analysis and draft budget as provided in (c) of this subsection.

(2) Tracking of revenues, time and expenditures.

(a) Revenues. Ecology shall track revenues on a source-specific basis.

(b) Time and expenditures. Ecology shall track time and expenditures on the basis of source categories and functional categories, except that, as part of a demonstration project undertaken pursuant to RCW 70.94.162, ecology will track time and expenditures on a source-specific basis for at least three but no more than five sources.

(i) Sources will be grouped into five categories, as follows:

(A) Kraft pulping mills;

(B) Sulfite pulping mills;

(C) Metal processing and related industries;

(D) Sources located on the Hanford Reservation; and

(E) Other sources, including those sources under the jurisdiction of ecology's central and eastern regional offices.

(ii) Functions will be grouped into several categories and subcategories, as follows:

(A) Program management and support;

(B) Program development;

(C) Permit processing;

(I) Application assistance and review;

(II) Preparing draft and final permits;

(D) Permit management and compliance activities;

(E) Technical assistance; and

(F) Outreach and education.

(c) Use of information obtained from tracking revenues, time and expenditures.

(i) Ecology shall use the information obtained from tracking revenues, time and expenditures to modify its workload analysis during the biennial review provided for under WAC 173-401-900.

(ii) The information obtained from tracking revenues, time and expenditures shall not provide a basis for challenge to the amount of an individual source's fee.

(3) Periodic fiscal audits, reports and performance audits. A system of regular, periodic fiscal audits, reports and performance audits shall be conducted in order to evaluate the implementation of the operating permit program by ecology and delegated local authorities. Ecology and each delegated local authority shall gather baseline data, where appropriate, to which the various evaluation criteria will be compared.

(a) Fiscal audits. Ecology and each delegated local authority shall contract with the state auditor to have the auditor perform a standard fiscal audit of ecology's and each delegated local authority's operating permit program every other year.

(b) Annual routine performance audits. Ecology and each local authority shall be subject to annual routine perfor-

mance audits, except that the routine performance audit shall be incorporated into the extensive performance audit, conducted pursuant to subsection (3)(d) of this section, in each year during which an extensive performance audit is conducted. Ecology shall conduct the audits of each of the delegated local authorities. An individual from another state's environmental agency shall conduct the audit of ecology. In the event that no such individual is able to serve in this capacity, an independent contractor shall conduct the audit of ecology; the contractor is to be free of any conflicts of interest, to the extent possible, and is to be agreed upon by a committee comprised of one representative each from the environmental and regulated communities, and one representative of a delegated local authority. Any contractor applying to conduct the audit of ecology shall be required to disclose in its application any potential conflicts of interest. The annual routine performance audits shall incorporate by reference information contained in the relevant annual report and, every other year, in the relevant fiscal audit. The annual routine performance audits shall address the following questions and measures of performance:

(i) How many permits lapsed?

(A) Explanation of lapse;

(B) Comments;

(ii) What is the total number of permit applications or applications for permit modifications?

(A) Average application processing time;

(B) Number of disapproved applications and reason for disapproval;

(C) Number of permit applications regarding which permitting authority had to return to source to request additional information. Number of times permitting authority had to return to source before permit deemed complete;

(iii) To how many permits did the EPA object? To what percentage of permits did EPA object (including objection upon petition from public)?

(A) Grounds for objection;

(B) Agency response;

(I) Deficiency remedied;

(II) Timeliness (that is to say, within ninety days? Did administrator issue permit?)

(iv) How many permits were subject to legal/administrative challenge? What percentage of permits were subject to legal/administrative challenge?

(A) Challenging party;

(B) Grounds for challenge;

(I) Substantive;

(II) Procedural;

(C) Outcome of challenge/prevailing party;

(D) Agency response;

(v) How many administrative enforcement actions were taken for failure to meet permit requirements? How many notices of violation were issued?

(A) Date issued; time elapsed since violation discovered;

(B) Reason;

(C) Result (that is to say, penalties? Orders of agreement? Legal challenge?)

(D) Source returned to compliance; date; (if not, explain);

(vi) What was the frequency of inspections at each facility?

(A) Announced;

(B) Unannounced;

(C) Comparison with baseline data;

(vii) How many accidental releases, as defined in Section 112(r) of the Federal Clean Air Act, occurred?

(A) Reason identified;

(B) Agency response;

(C) Resulting changes to terms of permit, if any;

(D) Comparison with baseline data;

(viii) What was the amount of the expenditures per permit issuance?

(A) Average for program;

(B) Average for source category;

(c) Annual random individual permit review. Five percent of the permits issued by each permitting authority, or if five percent of the permits issued by a permitting authority is equal to or less than one, at least one permit issued by the permitting authority shall be subject to review each year in conjunction with the annual routine performance audit. The permit to be reviewed shall be selected at random. Ecology shall conduct the review in the case of each of the delegated local authorities. An individual from another state's environmental agency shall conduct the audit of ecology. In the event that no such individual is able to serve in this capacity, an independent contractor shall conduct the audit of ecology; the contractor is to be free of any conflicts of interest, to the extent possible and is to be agreed upon by a committee comprised of one representative each from the environmental and regulated communities, and one representative of a delegated local authority. Any contractor applying to conduct the audit of ecology shall be required to disclose in its application any potential conflicts of interest. The annual random individual permit review shall address the following questions and measures of performance:

(i) Can reviewer, from information available in permit, determine all requirements to which the source is subject?

(ii) Does permit include all applicable requirements?

(iii) Can reviewer, from information available in file, determine compliance status for each emission point? For facility?

(iv) Does the file include technical reviews, source tests, CEM performance specification tests, permit applications, record of citizen complaints, correspondence with facility and other supporting documentation?

(v) Are all major emissions points identified in permit?

(vi) Are all pieces of control equipment identified in permit?

(vii) Does the permit specify operation and maintenance requirements?

(viii) Does the permit specify all monitoring, recording, reporting and certification requirements to which source is subject?

(ix) Are alternative operating scenarios specified in permit? Are the conditions adequately specified?

(x) Is the permit expiration date noted?

(xi) Does the permit indicate which requirements are enforceable by federal/state mechanisms? Does the permit

state the existence of opportunity for PCHB and other judicial review and opportunity to petition EPA?

(xii) Were all procedural requirements, including notice to public and affected states, satisfied in issuing/modifying permit?

(xiii) Did permit writer work with source to identify and consider opportunities for pollution prevention? Were any pollution prevention measures implemented?

(xiv) Evaluation of overall performance:

(A) Is permit complete and understandable? Assess completeness, clarity, etc.;

(B) Assess procedural adequacy of permit issuance process.

(d) Periodic extensive performance audits. Ecology and each local authority shall be subject to extensive performance audits every five years. In addition, ecology or a delegated local authority may be subject to an extensive performance audit more frequently under the conditions of WAC 173-401-920 (3)(e). Ecology shall conduct the audits of each of the delegated local authorities. An individual from another state's environmental agency shall conduct the audit of ecology. In the event that no such individual is able to serve in this capacity, an independent contractor shall conduct the audit of ecology; the contractor is to be free of any conflicts of interest, to the extent possible and is to be agreed upon by a committee comprised of one representative each from the environmental and regulated communities, and one representative of a delegated local authority. Any contractor applying to conduct the audit of ecology shall be required to disclose in its application any potential conflicts of interest. The extensive performance audits shall incorporate by reference the information contained in the annual reports and the routine performance audits for the relevant period and shall take the place of the routine performance audit every fifth year (that is to say, they gather the routine performance audit information in addition to the information indicated below). The extensive performance audits shall address the following questions and measures of performance:

(i) What was the number of modifications?

(A) Comparison with projection;

(B) Applicable to how many sources;

(ii) Did the permitting authority have personnel adequate to complete workload in timely fashion?

(iii) Were the total fees assessed adequate to fund program?

(A) Amount of shortfall or overcharge;

(B) Explanation;

(iv) Were the total fees collected equal to total fees assessed?

(A) Amount/percentage of shortfall;

(B) Reason for shortfall;

(v) Was there a program budget increase or decrease over period?

(A) Percentage increase or decrease;

(B) Explanation (for example, sources no longer part of operating permit program; new federal requirements implemented through permit program);

(vi) What was the number of instances of late fee payment?

(A) Agency response;

(B) Result (that is to say, was the fee paid? Penalty assessed? Time interval between payment and date fee amount due?)

(vii) How many sources were in compliance with all applicable requirements? What percentage of sources were in compliance with all applicable requirements? How do the number and percentage of sources in compliance with all applicable requirements compare with baseline compliance data?

(viii) What was the number of businesses availing themselves of services offered by state or local business assistance programs? What level of effort was required to provide assistance?

(ix) Were inspection results adequately documented?

(x) Were the methods used to ascertain compliance and the frequency of required reporting and related activities appropriate for each facility?

(A) Frequency of inspections appropriate for relevant facility;

(B) Monitoring requirements appropriate for relevant facility;

(xi) Were the operation and maintenance plans adequate?

(xii) Were public information efforts adequate?

(A) Public notice for actions relating to permitted sources meets/exceeds statutory requirements;

(B) Agency/permit writers accessible to regulated community, to environmental community, and to stakeholders and general public;

(C) Other outreach efforts;

(xiii) Evaluation of overall performance:

(A) Is permitting authority issuing quality permits?

(B) Is permitting authority issuing/renewing permits in timely fashion?

(C) Is permitting authority ensuring that sources are in compliance with terms and conditions of permit?

(D) Is permitting authority effectively using operating permit as a tool for securing environmental improvements?

(E) Is permitting authority efficiently administering program (includes, in the case of ecology, statewide program)? Indicate inefficiencies, where these exist;

(F) Evaluation of particular questions identified in annual report/routine performance audit for further examination;

(e) Finding of inadequate administration or need for further evaluation. If, in the process of conducting a fiscal audit, annual routine performance audit, or annual random individual permit review, the entity conducting the audit finds that ecology or a delegated local authority is inadequately administering the operating permit program or finds that further evaluation is immediately warranted, an extensive performance audit shall be conducted, as provided in WAC 173-401-920 (4)(d).

(f) Preaudit public meeting with auditor. Ecology and each delegated local authority shall provide the opportunity for interested individuals to provide comment to the entity conducting an annual routine performance audit, annual random permit review or extensive performance audit prior to the audit. Such opportunity shall consist of a single, informal meeting at which at least one representative from the regu-

lated community and at least one representative of the environmental community are present. Ecology and each delegated local authority shall provide notice of the preaudit meeting in the *Permit Register*.

(g) Annual reports. Ecology and each delegated local authority shall prepare an annual report evaluating its operating permit program administration. Such report shall include any findings resulting from the relevant fiscal audits, annual routine performance audits, annual random individual permit reviews or periodic extensive performance audits. Ecology shall submit its annual report to the appropriate standing committees of the legislature. Each delegated local authority shall submit its report to its board of directors and to ecology.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-920, filed 12/30/93, effective 1/30/94.]

WAC 173-401-925 Source data statements and petition for review of statements—Ecology and delegated local authorities. (1) Preliminary source data statements. Ecology shall provide to the permit program sources under its jurisdiction and to those persons on the mailing list, maintained in accordance with WAC 173-401-920 (1)(c), or to those requesting receipt of source data statements under this subsection a preliminary statement of emissions and other data from that source upon which ecology intends to base its allocation determination under WAC 173-401-900(5) as well as a preliminary statement of emissions and other data from each of the permit program sources under ecology's jurisdiction upon which ecology intends to base its allocation determination. Such preliminary statement shall be provided to the permit program sources and to other persons on the mailing list on or before July 31 of each year. Such preliminary statement shall indicate the name, address and telephone number of the person or persons to whom the source or other individual may direct inquiries and/or petitions for review under subsection (2) of this section regarding the accuracy of the data contained therein.

(2) Petition for review of statement. A permit program source or other individual may petition ecology to review for accuracy the data contained in any preliminary source data statement provided for under subsection (1) of this section. Such petition shall be lodged on or before August 31 of each year. Such petition shall be in writing, directed to the individual indicated on the statement of source data. Such petition shall indicate clearly the data to be reviewed, the specific action that the source or petitioning individual is requesting be taken and may, if the source or petitioning individual desires, be accompanied by written documentation supporting the request for review. Such petition shall, in addition, state the name, address and telephone number of the person or persons to whom ecology may direct inquiries regarding the request. Upon receipt of such a petition, ecology must issue its written response to the petitioner and any other affected party on or before September 30 of each year. Such response shall state the conclusions of the review and the reasons therefore, and shall contain a new preliminary source data statement, revised to reflect any changes necessitated by ecology's response.

(3) Final source data statement. Ecology shall provide to the permit program sources under its jurisdiction and to those persons on the mailing list, maintained in accordance with WAC 173-491-920 (1)(c), or to those requesting receipt of source data statements under this subsection a final statement of emissions and other data from that source upon which ecology will base its allocation determination under WAC 173-401-900 on or before October 31 of each year. In addition, the final source data statements shall include a final statement of emissions and other data upon which ecology intends to base its allocation determination from each of the permit program sources under its jurisdiction. The final source data statement will be accompanied by a fee schedule reflecting the fee to be paid by each source. Ecology may include with the fee schedule an invoice, or a notice stating that fees listed in the fee schedule must be paid by February 28th of the following year.

(4) Delegated local authorities. Delegated local authorities shall establish procedures for administrative dispute resolution for disputes pertaining to fees.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-925, filed 12/30/93, effective 1/30/94.]

WAC 173-401-930 Fee payment and penalties—Ecology. (1) Fee payment. Each permit program source under ecology's jurisdiction shall pay a fee in the amount reflected in the fee schedule or invoice issued under WAC 173-401-925(3). Such fee shall be due on or before February 28 of each year.

(2) Failure to pay fees. Ecology shall charge a penalty to a permit program source under its jurisdiction for failure to pay all or part of its operating permit fee after ninety days past the due date for fee payment. Ecology may charge such penalty in an amount up to three times the source's total original assessed fee.

(3) Other penalties. The penalties authorized in subsection (2) of this section are additional to and in no way prejudice ecology's or a local air authority's ability to exercise other civil and criminal remedies, including the authority to revoke a source's operating permit for failure to pay all or part of its operating permit fee.

(4) Facility closure. Sources that permanently cease operations will be required to pay only a pro rata portion of the annual operating permit fee for the fiscal year in which they cease operations. The portion of the fee to be paid will be calculated by dividing the number of calendar days that have passed in the relevant fiscal year at the time the source ceases operations by the total of three hundred sixty-five calendar days, and multiplying the fraction thus derived by the fee that the source would have paid for the relevant fiscal year, had it not ceased operations.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-930, filed 12/30/93, effective 1/30/94.]

WAC 173-401-935 Development and oversight remittance by local authorities—Ecology and delegated local authorities. (1) Collection. On or before October 31 of each year, ecology shall provide to each delegated local authority a statement of the share of ecology's development and oversight costs for which the authority is responsible for collecting from sources under its jurisdiction.

(2) Remittance. Each delegated local authority shall remit to ecology one-half of the share of ecology's development and oversight costs for which it is responsible for collecting from sources under its jurisdiction on or before March 31 of each year and shall remit to ecology the balance of its share of ecology's development and oversight costs on or before June 30 of each year.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-935, filed 12/30/93, effective 1/30/94.]

WAC 173-401-940 Fee eligible activities—Ecology and delegated local authorities. (1) Permit administration activities shall include:

(a) Preapplication assistance and review of an application and proposed compliance plan for a permit, permit revision, or renewal;

(b) Source inspections, testing and other data-gathering activities necessary for the development or a permit, permit revision, or renewal;

(c) Acting on an application for a permit, permit revision, or renewal, including the costs of developing an applicable requirement as part of the processing of a permit, permit revision, or renewal, preparing a draft permit and fact sheet, and preparing a final permit, but excluding the costs of developing BACT, LAER, BART, or RACT requirements for criteria and toxic air pollutants;

(d) Notifying and soliciting, reviewing and responding to comment from the public and contiguous states and tribes, conducting public hearings regarding the issuance of a draft permit and other costs of providing information to the public regarding operating permits and the permit issuance process;

(e) Modeling necessary to establish permit limits or to determine compliance with permit limits;

(f) Reviewing compliance certifications and emissions reports and conducting related compilation and reporting activities;

(g) Conducting compliance inspections, complaint investigations, and other activities necessary to ensure that a source is complying with permit conditions;

(h) Administrative enforcement activities and penalty assessment, excluding the costs of proceedings before the pollution control hearings board and all costs of judicial enforcement;

(i) The share attributable to permitted sources of the development and maintenance of emissions inventories;

(j) The share attributable to permitted sources of ambient air quality monitoring and associated recording and reporting activities;

(k) Training for permit administration and enforcement;

(l) Fee determination, assessment, and collection, including the costs of necessary administrative dispute resolution and penalty collection;

(m) Required fiscal audits, periodic performance audits, and reporting activities;

(n) Tracking of time, revenues and expenditures, and accounting activities;

(o) Administering the permit program including the costs of clerical support, supervision, and management; and

(p) Other activities required by operating permit regulations issued by the United States Environmental Protection Agency under the Federal Clean Air Act.

(2) Development and oversight activities shall include:

(a) Review and determinations necessary for delegation of authority to administer and enforce a permit program to a local air authority under RCW 70.94.161(2) and 70.94.860;

(b) Conducting fiscal audits and periodic performance audits of delegated local authorities, and other oversight functions required by the operating permit program;

(c) Administering enforcement actions taken by the department on behalf of a permitting authority, including those actions taken by the department under RCW 70.94.785, but excluding the costs of proceedings before the pollution control hearings board and all costs of judicial enforcement;

(d) Determination and assessment with respect to each permitting authority of the fees covering its share of the costs of development and oversight;

(e) Training and assistance for permit program administration and oversight, including training and assistance regarding technical, administrative, and data management issues;

(f) Development of generally applicable regulations or guidance regarding the permit program or its implementation or enforcement;

(g) State codification of federal rules or standards for inclusion in operating permits;

(h) Preparation of delegation package and other activities associated with submittal of the state permit program to the United States Environmental Protection Agency for approval, including ongoing coordination activities;

(i) General administration and coordination of the state permit program, related support activities, and other agency indirect costs, including necessary data management and quality assurance;

(j) Required fiscal audits and periodic performance audits of the department, and reporting activities;

(k) Tracking of time, revenues and expenditures, and accounting activities;

(l) Public education and outreach related to the operating permit program, including the maintenance of a permit register;

(m) The share attributable to permitted sources of compiling and maintaining emissions inventories;

(n) The share attributable to permitted sources of ambient air quality monitoring, related technical support, and associated recording activities;

(o) Provision of assistance to small business as required under Section 507 of the Federal Clean Air Act as it exists on the effective date of this act or its later enactment as adopted by reference by the director by rule;

(p) Provision of services by the department of revenue and the office of the state attorney general and other state agencies in support of permit program administration;

(q) A one-time revision to the state implementation plan to make those administrative changes necessary to ensure coordination of the state implementation plan and the operating permit program; and

(r) Other activities required by operating permit regulations issued by the United States Environmental Protection Agency under the Federal Clean Air Act.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-940, filed 12/30/93, effective 1/30/94.]

Chapter 173-405 WAC
KRAFT PULPING MILLS

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-405-011	Statement of policy and purpose. [Order DE 76-35, § 173-405-011, filed 12/28/76. Formerly WAC 18-36-011.] Repealed by 80-11-060 (Order DE 80-15), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-405-031	Specific emission standards. [Order DE 76-35, § 173-405-031, filed 12/28/76. Formerly WAC 18-36-031.] Repealed by 80-11-060 (Order DE 80-15), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-405-036	General emission standards and nuisance control measures. [Order DE 76-35, § 173-405-036, filed 12/28/76. Formerly WAC 18-36-036.] Repealed by 80-11-060 (Order DE 80-15), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-405-041	Emission requirements of prior jurisdictions. [Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-405-041, filed 3/6/85.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-405-071	Monitoring and reporting. [Order DE 76-35, § 173-405-071, filed 12/28/76. Formerly WAC 18-36-071.] Repealed by 80-11-060 (Order DE 80-15), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-405-076	Report of startup, shutdown, breakdown or upset condition. [Order DE 76-35, § 173-405-076, filed 12/28/76. Formerly WAC 18-36-076.] Repealed by 80-04-049 (Order DE 80-7), filed 3/21/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331.
173-405-081	Notice of construction. [Order DE 76-35, § 173-405-081, filed 12/28/76. Formerly WAC 18-36-081.] Repealed by 80-04-049 (Order DE 80-7), filed 3/21/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331.
173-405-090	Operating permit. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-090, filed 8/20/80.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.
173-405-101	Exemption. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-101, filed 8/20/80; Order DE 76-35, § 173-405-101, filed 12/28/76. Formerly WAC 18-36-101.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

WAC 173-405-012 Statement of purpose. These rules are enacted under the provisions of the Washington Clean Air Act as amended (RCW 70.94.395) to:

(1) Assume state jurisdiction over emissions from kraft pulping mills to provide for the systematic control of air pollution in this industry and for the proper development of the state's natural resources; and

(2) Establish technically feasible and reasonably attainable standards and revise such standards as new information and better technology are developed and become available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-012, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-012, filed 8/20/80.]

WAC 173-405-021 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter shall have the following meanings:

(1) "Kraft mill" means any manufacturing facility which uses an alkaline solution containing sodium hydroxide and/or sodium sulfide, and any other chemical pulping facility, except those covered by chapter 173-410 WAC, to produce pulp and/or paper products from wood fibers. For the purposes of this regulation "kraft mill" is equivalent to "source."

(2) "Noncondensibles" means gases and vapors from the digestion and evaporation processes of a mill that are not condensed with the equipment used in those processes.

(3) "Recovery furnace stack" means the stack from which the products of combustion from the recovery furnace are emitted to the ambient air.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-021, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-405-021, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-021, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-021, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-021, filed 3/21/80; Order DE 76-35, § 173-405-021, filed 12/28/76. Formerly WAC 18-36-021.]

WAC 173-405-033 Standards of performance. The provisions of WAC 173-400-115 "Standards of performance for new sources" shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-033, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-033, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-033, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-033, filed 3/21/80.]

WAC 173-405-035 Emission standards for sources emitting hazardous air pollutants. The provisions of WAC 173-400-075 "Emission standards for sources emitting hazardous air pollutants" shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-035, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-18-010 (Order DE 83-22), § 173-405-035, filed 8/26/83.]

WAC 173-405-040 Emission standards. In addition to the general applicability of chapters 173-400 and 173-490 WAC to all emission sources; no kraft pulp mill shall cause or permit air contaminant emissions in excess of the limits listed below. Specific emission standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.

(1) Recovery furnaces.

(a) The particulate emissions from each recovery furnace stack shall not exceed 0.23 grams of particulate per dry cubic meter at standard conditions (0.10 grains/dscf) corrected to eight percent oxygen averaged over three one hour tests.

(b) The TRS emissions from each recovery furnace stack constructed before January 1, 1970, and for recovery furnaces that have direct contact evaporators, shall not exceed 17.5 ppm corrected to eight percent oxygen for a daily average.

(c) The TRS emissions from each recovery furnace constructed after January 1, 1970, which does not have a contact evaporator, shall not exceed 5.0 ppm corrected to eight percent oxygen for a daily average.

(2) Smelt dissolver tank vent. The particulate emissions from smelt dissolver tank vents shall not exceed 0.15 grams per kilogram (0.30 pounds per ton) of solids fired at the associated recovery furnace.

(3) Lime kilns.

(a) The particulate emission from each lime kiln stack shall not exceed 0.30 grams of particulate per dry cubic meter (0.13 grains/dscf) at standard conditions corrected to ten percent oxygen.

(b) The TRS emissions from any lime kiln stack shall not exceed eighty ppm expressed as hydrogen sulfide for more than two consecutive hours in any one day.

(c) The average daily emission of TRS from any lime kiln stack shall not exceed fifty ppm. After January 1, 1985, TRS emissions from each lime kiln stack shall not exceed twenty ppm corrected to ten percent oxygen for a daily average.

(4) Other TRS emissions units. Noncondensibles from digesters, multiple-effect evaporators and condensate stripper system shall at all times be treated to reduce the emissions of TRS equal to the reduction achieved by thermal oxidation in a lime kiln. A backup treatment system or equivalent approved by ecology must be installed to assure continual treatment.

(5) Other particulate emissions units. The emission of particulates from emissions units other than kraft recovery furnaces, lime kilns, or smelt dissolving tank vents, shall not exceed the following maximums:

(a) 0.46 grams per dry cubic meter at standard conditions (0.2 grains/dscf) corrected to seven percent oxygen, for units which combust wood and wood residue to produce steam and which commenced construction prior to January 1, 1983.

(b) 0.12 grams per dry cubic meter at standard conditions (0.05 grains/dscf) corrected to seven percent oxygen, for units which combust fuel other than wood and wood residue to produce steam, and which commenced construction after January 1, 1983.

(c) 0.23 grams per dry cubic meter at standard conditions (0.1 grains/dscf) corrected to seven percent oxygen in the case of combustion units, for units not classified under (a) or (b) of this subsection.

(6) Opacity. No person shall cause or allow the emission of a plume from any kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than thirty-five percent for more than six consecutive minutes in any sixty minute period, except as described in WAC 173-405-040(7).

No person shall cause or allow the emission of a plume, from any emissions unit other than a kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than twenty percent for more than six consecutive minutes in any sixty minute period, except that these provisions do not apply when the emissions occur due to soot blowing/grate cleaning and the operator can demonstrate that the emissions will not exceed twenty percent opacity for more than fifteen minutes in any eight consecutive hours. The intent of this provision is to permit soot blowing and grate cleaning necessary to the operation of the boiler facility. This practice, except for testing and trouble shooting, is to be scheduled for the same approximate times each day and ecology shall be advised of the schedule.

There shall be no more than one violation notice issued in any sixty minute period.

These provisions (of WAC 173-405-040(6)) shall not apply when the presence of uncombined water is the only reason for the opacity of the plume to exceed the applicable maximum.

(7) Each mill may petition for, and ecology may establish by regulatory order, alternate opacity limits for a specific kraft recovery furnace or lime kiln, providing:

(a) The mill can demonstrate compliance; with all other applicable emission limits; and

(b) Best practicable operation and maintenance procedures, as approved by ecology, are continuously employed.

(8) Any person electing to apply for exceptions per the provisions of WAC 173-405-040(7) shall submit a program acceptable to ecology. The program shall include the following information: The amount and concentration of suspended particulate material emitted during best practicable operating procedures, opacity recorded at such emission level, the type of equipment and procedures which will be used to demonstrate compliance and the time required for installation of the equipment.

(9) The opacity provisions of this chapter shall apply until an application is received by ecology, petitioning for a revised limit as allowed by WAC 173-405-040(7). After a petition is received, enforcement of the opacity provisions will be stayed until the application is rejected or a new limit is established.

(10) Operation and maintenance. At all times, including periods of abnormal operation and upset conditions, owners and operators shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to ecology which may include, but is not limited to, monitoring results, opacity

observations, review of operating and maintenance procedures, and inspection of the source.

(11) SO_2.

(a) The emission of sulfur dioxide from any recovery furnace or lime kiln shall not exceed five hundred ppm for an hourly average, corrected to eight percent oxygen for a recovery furnace or to ten percent oxygen for a lime kiln.

(b) The emission of sulfur dioxide from any emissions unit other than a recovery furnace or lime kiln shall not exceed one thousand ppm for an hourly average, corrected to seven percent oxygen for combustion units.

(12) Source testing. To demonstrate compliance with this chapter, the provisions of WAC 173-400-105 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-040, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-040, filed 8/20/80.]

WAC 173-405-045 Creditable stack height and dispersion techniques. The provisions of WAC 173-400-200 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-045, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-405-045, filed 12/16/87.]

WAC 173-405-061 More restrictive emission standards. Ecology may establish more restrictive emission standards for new mills or for mills expanding existing facilities pursuant to WAC 173-400-110.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-061, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-061, filed 4/15/83; Order DE 76-35, § 173-405-061, filed 12/28/76. Formerly WAC 18-36-061.]

WAC 173-405-072 Monitoring requirements. Each mill shall conduct routine monitoring of emissions in accordance with a program that has been approved by ecology. Results of the monitoring shall be reported within fifteen days of the end of each calendar month and shall include data as follows:

(1) Particulate: The results of particulate measurements made on each source during the month.

(2) TRS:

(a) The average TRS concentration expressed in units of the standard for each recovery furnace and lime kiln stack.

(b) The date, time and concentration of TRS for each TRS emissions violation and the total numbers of hours that exceed the standard.

(3) Opacity or other continuous monitor:

(a) The date and time of opacity in excess of the standard.

(b) If equipment for continuous monitoring of opacity is not available, continuous monitoring of operating parameters may be required by a regulatory order as an alternate. If an alternate is approved, the date and time of each occurrence in excess of the regulatory order must be reported.

(4) Production: The average daily production of air-dried unbleached pulp.

(5) Other data: Each kraft mill shall furnish, upon request of ecology, such other pertinent data required to evaluate the mill's emissions or emission control program.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-072, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-072, filed 8/20/80.]

WAC 173-405-077 Report of startup, shutdown, breakdown or upset conditions. The provisions of WAC 173-400-105(5) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-077, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-077, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-077, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-077, filed 3/21/80.]

WAC 173-405-078 Emission inventory. The provisions of WAC 173-400-105(1) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-078, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 89-02-055 (Order 88-39), § 173-405-078, filed 1/3/89; 83-09-036 (Order DE 83-13), § 173-405-078, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-078, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-078, filed 3/21/80.]

WAC 173-405-086 New source review (NSR). The provisions of WAC 173-400-110 shall apply to all new sources and emissions units to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-086, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-086, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-086, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-086, filed 3/21/80.]

WAC 173-405-087 Prevention of significant deterioration (PSD). The provisions of WAC 173-400-141 shall apply to all new major sources and major modifications to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-087, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-405-087, filed 12/16/87.]

WAC 173-405-091 Special studies. Ecology may require such additional special studies relevant to process emissions and establish completion dates as it determines necessary.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-091, filed 2/19/91, effective 3/22/91; Order DE 76-35, § 173-405-091, filed 12/28/76. Formerly WAC 18-36-091.]

Chapter 173-406 WAC
ACID RAIN REGULATION

WAC

PART I
GENERAL PROVISIONS

WAC 173-406-100 Acid rain program general provisions.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-100, filed 11/23/94, effective 12/24/94.]

WAC 173-406-101 Definitions. The terms used in this regulation shall have the meanings set forth in Title IV of the Clean Air Act, 42 U.S.C. 7401, et seq. as amended by the Clean Air Act Amendments of 1990, 42 U.S.C. 7651, et seq. (November 15, 1990,) and in this section as follows:

(1) "Acid rain compliance option" means one of the methods of compliance used by an affected unit under the acid rain program as described in a compliance plan submitted and approved in accordance with WAC 173-406-400 or regulations implementing section 407 of the act.

(2) "Acid Rain emissions limitation" means:

(a) For the purposes of sulfur dioxide emissions:

(i) The tonnage equivalent of the basic Phase II allowance allocations authorized to be allocated to an affected unit for use in a calendar year;

(ii) As adjusted:

(A) By allowances allocated by the administrator pursuant to section 403, section 405 (a)(2), (a)(3), (b)(2), (c)(4), (d)(3), and (h)(2), and section 406 of the act;

(B) By allowances allocated by the administrator pursuant to subpart D of 40 CFR part 72; and thereafter

(C) By allowance transfers to or from the compliance subaccount for that unit that were recorded or properly submitted for recordation by the allowance transfer deadline pursuant to 40 CFR 73.35, after deductions and other adjustments are made pursuant to 40 CFR 73.34(c); and

(b) For purposes of nitrogen oxides emissions, the applicable limitation established by regulations promulgated by the administrator pursuant to section 407 of the act, as modified by an acid rain permit application submitted to the permitting authority, and an acid rain permit issued by the permitting authority, in accordance with regulations implementing section 407 of the act.

(3) "Acid rain emissions reduction requirement" means a requirement under the acid rain program to reduce the emissions of sulfur dioxide or nitrogen oxides from a unit to a specified level or by a specified percentage.

(4) "Acid rain permit or permit" means the legally binding written document, or portion of such document, issued by the permitting authority (following an opportunity for appeal pursuant to 40 CFR part 78, chapter 43.21 RCW or other administrative appeals procedures established by the permitting authority), including any permit revisions, specifying the acid rain program requirements applicable to an affected source, to each affected unit at an affected source, and to the owners and operators and the designated representative of the affected source or the affected unit.

(5) "Acid rain program" means the National Sulfur Dioxide and Nitrogen Oxides Air Pollution Control and Emissions Reduction Program established in accordance with Title IV of the act, WAC 173-406-100 through 173-406-1000, 40

CFR parts 72, 73, 75, 77, and 78, and regulations implementing sections 407 and 410 of the act.

(6) "Act" means the Clean Air Act, 42 U.S.C. §7401, et seq. as amended by Public Law No. 101-549 (November 15, 1990).

(7) "Actual SO_2 emissions rate" means the annual average sulfur dioxide emissions rate for the unit (expressed in lb/mmBtu), for the specified calendar year; provided that, if the unit is listed in the National Allowance Data Base, the "1985 actual SO_2 emissions rate" for the unit shall be the rate specified by the administrator in the NADB under the data field "SO2RTE."

(8) "Administrator" means the Administrator of the United States Environmental Protection Agency or the administrator's duly authorized representative.

(9) "Affected source" means a source that includes one or more affected units.

(10) "Affected state" means a state whose boundary is within fifty statute miles of an affected source within the state of Washington.

(11) "Affected unit" means a unit that is subject to any acid rain emissions reduction requirement or acid rain emissions limitation.

(12) "Affiliate" shall have the meaning set forth in section 2 (a)(11) of the Public Utility Holding Company Act of 1935, 15 U.S.C. 79b (a)(11), as of November 15, 1990.

(13) "Allocate or allocation" means the initial crediting of an allowance by the administrator to an allowance tracking system unit account or general account.

(14) "Allowance" means an authorization by the administrator under the acid rain program to emit up to one ton of sulfur dioxide during or after a specified calendar year.

(15) "Allowance deduction, or deduct when referring to allowances," means the permanent withdrawal of allowances by the administrator from an allowance tracking system compliance subaccount to account for the number of the tons of SO_2 emissions from an affected unit for the calendar year, for tonnage emissions estimates calculated for periods of missing data pursuant to 40 CFR part 75, or for any other allowance surrender obligations of the acid rain program.

(16) "Allowances held or hold allowances" means the allowances recorded by the administrator, or submitted to the administrator for recordation in accordance with 40 CFR 73.50, in an allowance tracking system account.

(17) "Allowance tracking system or ATS" means the acid rain program system by which the administrator allocates, records, deducts, and tracks allowances.

(18) "Allowance tracking system account" means an account in the allowance tracking system established by the administrator for purposes of allocating, holding, transferring, and using allowances.

(19) "Allowance transfer deadline" means midnight of January 30th or, if January 30th is not a business day, midnight of the first business day thereafter and is the deadline by which allowances may be submitted for recordation in an affected unit's compliance subaccount for the purposes of meeting the unit's acid rain emissions limitation requirements for sulfur dioxide for the previous calendar year.

(20) "Authorized account representative" means a responsible natural person who is authorized, in accordance with 40 CFR part 73, to transfer and otherwise dispose of allowances held in an allowance tracking system general account; or, in the case of a unit account, the designated representative of the owners and operators of the affected unit.

(21) "Auxiliary firing" means the combustion of additional fuel downstream of a gas turbine for the purpose of adding thermal energy to the exhaust gases which can be recovered in a waste heat recovery unit.

(22) "Basic Phase II allowance allocations" means:

(a) For calendar years 2000 through 2009 inclusive, allocations of allowances made by the administrator pursuant to section 403 and section 405 (b)(1), (3), and (4); (c)(1), (2), (3), and (5); (d)(1), (2), (4), and (5); (e); (f); (g)(1), (2), (3), (4), and (5); (h)(1); (i); and (j).

(b) For each calendar year beginning in 2010, allocations of allowances made by the administrator pursuant to section 403 and section 405 (b)(1), (3), and (4); (c)(1), (2), (3), and (5); (d)(1), (2), (4), and (5); (e); (f); (g)(1), (2), (3), (4), and (5); (h)(1) and (3); (i); and (j).

(23) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or any other medium.

(24) "Certificate of representation" means the completed and signed submission required by 40 CFR 72.20, for certifying the appointment of a designated representative for an affected source or a group of identified affected sources authorized to represent the owners and operators of such source(s) and of the affected units at such source(s) with regard to matters under the acid rain program.

(25) "Certifying official" means:

(a) For a corporation, 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;

(b) For partnership or sole proprietorship, a general partner or the proprietor, respectively; and

(c) For a local government entity or state, federal, or other public agency, either a principal executive officer or ranking elected official.

(26) "Coal" means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials Designation ASTM D388-92 *"Standard Classification of Coals by Rank."*

(27) "Coal-derived fuel" means any fuel, whether in a solid, liquid, or gaseous state, produced by the mechanical, thermal, or chemical processing of coal (e.g., pulverized coal, coal refuse, liquefied or gasified coal, washed coal, chemically cleaned coal, coal-oil mixtures, and coke).

(28) "Coal-fired" means the combustion of fuel consisting of coal or any coal-derived fuel (except a coal-derived gaseous fuel with a sulfur content no greater than natural gas), alone or in combination with any other fuel, where a unit is "coal-fired" if it uses coal or coal-derived fuel as its primary fuel (expressed in mmBtu); provided that, if the unit is listed in the NADB, the primary fuel is the fuel listed in the NADB under the data field "PRIMEFUEL."

(29) "Cogeneration unit" means a unit that has equipment used to produce electric energy and forms of useful thermal energy (such as heat or steam) for industrial, com-

mercial, heating or cooling purposes, through the sequential use of energy.

(30) "Commence commercial operation" means to have begun to generate electricity for sale, including the sale of test generation.

(31) "Commence construction" means that an owner or operator has either undertaken a continuous program of construction or has entered into a contractual obligation to undertake and complete, within eighteen months, a continuous program of construction. The permitting authority may, upon application by the owner or operator, extend the period for completion at its discretion.

(32) "Commence operation" means to have begun any mechanical, chemical, or electronic process, including start-up of an emissions control technology or emissions monitor or of a unit's combustion chamber.

(33) "Common stack" means the exhaust of emissions from two or more units through a single flue.

(34) "Compliance certification" means a submission to the administrator or the permitting authority that is required by WAC 173-406-100 through 173-406-1000, by 40 CFR part 72, 73, 75, 77, or 78, or by regulations implementing sections 407 or 410 of the act to report an affected source's or an affected unit's compliance or noncompliance with a provision of the acid rain program and that is signed and verified by the designated representative in accordance with subpart B of 40 CFR part 72, WAC 173-406-800, and the acid rain program regulations generally.

(35) "Compliance plan, for purposes of the acid rain program," means the document submitted for an affected source in accordance with WAC 173-406-301 and 173-406-302 specifying the method(s) (including one or more acid rain compliance options under WAC 173-406-402 or regulations implementing section 407 of the act) by which each affected unit at the source will meet the applicable acid rain emissions limitation and acid rain emissions reduction requirements.

(36) "Compliance subaccount" means the subaccount in an affected unit's allowance tracking system account, established pursuant to 40 CFR 73.31 (a) or (b), in which are held, from the date that allowances for the current calendar year are recorded under 40 CFR 73.34(a) until December 31st, allowances available for use by the unit in the current calendar year and, after December 31st until the date that deductions are made under 40 CFR 73.35(b), allowances available for use by the unit in the preceding calendar year, for the purpose of meeting the unit's acid rain emissions limitation for sulfur dioxide.

(37) "Compliance use date" means the first calendar year for which an allowance may be used for purposes of meeting a unit's acid rain emissions limitation for sulfur dioxide.

(38) "Construction" means fabrication, erection, or installation of a unit or any portion of a unit.

(39) "Control officer" means the air pollution control officer of a local air pollution control authority which is constituted under chapter 70.94 RCW.

(40) "Designated representative" means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with subpart B of 40 CFR part 72, to represent and legally bind each owner and operator, as a matter of federal law, in matters pertaining to the acid rain program. Whenever the term "responsible official" is used in 40 CFR part 70 or in any other regulations implementing Title V of the act, it shall be deemed to refer to the "designated representative" with regard to all matters under the acid rain program. An alternate designated representative is also included in this definition.

(41) "Diesel fuel" means a low sulfur fuel oil of grades 1-D or 2-D, as defined by the American Society for Testing and Materials ASTM D975-91, *"Standard Specification for Diesel Fuel Oils."*

(42) "Direct public utility ownership" means direct ownership of equipment and facilities by one or more corporations, the principal business of which is sale of electricity to the public at retail. Percentage ownership of such equipment and facilities shall be measured on the basis of book value.

(43) "Director" means the director of the Washington department of ecology.

(44) "Draft acid rain permit or draft permit" means the version of the acid rain permit, or the acid rain portion of an operating permit, that the permitting authority offers for public comment.

(45) "Ecology" means the Washington department of ecology.

(46) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the administrator by the designated representative and as determined by the administrator, in accordance with the emissions monitoring requirements of 40 CFR part 75.

(47) "EPA" means the United States Environmental Protection Agency.

(48) "Excess emissions" means:

(a) Any tonnage of sulfur dioxide emitted by an affected unit during a calendar year that exceeds the acid rain emissions limitation for sulfur dioxide for the unit; and

(b) Any tonnage of nitrogen oxides emitted by an affected unit during a calendar year that exceeds the annual tonnage equivalent of the acid rain emissions limitation for nitrogen oxides applicable to the affected unit taking into account the unit's heat input for the year.

(49) "Executive director" means the executive director of a local air pollution control authority which is constituted under chapter 70.94 RCW.

(50) "Existing unit" means a unit (including a unit subject to section 111 of the act) that commenced commercial operation before November 15, 1990, and that on or after November 15, 1990, served a generator with a nameplate capacity of greater than twenty-five MWe. "Existing unit" does not include simple combustion turbines or any unit that on or after November 15, 1990, served only generators with a nameplate capacity of twenty-five MWe or less. Any "existing unit" that is modified, reconstructed, or repowered after November 15, 1990, shall continue to be an "existing unit."

(51) "Facility" means any institutional, commercial, or industrial structure, installation, plant, source, or building.

(52) "Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

(53) "Fossil fuel-fired" means the combustion of fossil fuel or any derivative of fossil fuel, alone or in combination with any other fuel, independent of the percentage of fossil fuel consumed in any calendar year.

(54) "Fuel oil" means any petroleum-based fuel (including diesel fuel or petroleum derivatives such as oil tar) as defined by the American Society for Testing and Materials in ASTM D396-90a, *"Standard Specification for Fuel Oils,"* and any recycled or blended petroleum products or petroleum by-products used as a fuel whether in a liquid, solid or gaseous state.

(55) "Gas-fired" means the combustion of natural gas, or a coal-derived gaseous fuel with a sulfur content no greater than natural gas, for at least ninety percent of the average annual heat input during the previous three calendar years and for at least eighty-five percent of the annual heat input in each of those calendar years; and any fuel other than coal or any other coal-derived fuel for the remaining heat input, if any.

(56) "General account" means an allowance tracking system account that is not a unit account.

(57) "Generator" means a device that produces electricity and was or would have been required to be reported as a generating unit pursuant to the United States Department of Energy Form 860 (1990 edition).

(58) "Generator output capacity" means the full-load continuous rating of a generator under specific conditions as designed by the manufacturer.

(59) "Heat input" means the product (expressed in mmBtu/time) of the gross calorific value of the fuel (expressed in Btu/lb) and the fuel feed rate into the combustion device (expressed in mass of fuel/time) and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(60) "Independent power production facility (IPP)" means a source that:

(a) Is nonrecourse project financed, as defined by the Secretary of Energy at 10 CFR part 715;

(b) Is used for the generation of electricity, eighty percent or more of which is sold at wholesale; and

(c) Is a new unit required to hold allowances under Title IV of the act;

(d) Provided that direct public utility ownership of the equipment comprising the facility does not exceed fifty percent.

(61) "Life-of-the-unit, firm power contractual arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified generating unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

(a) For the life of the unit;

(b) For a cumulative term of no less than thirty years, including contracts that permit an election for early termination; or

(c) For a period equal to or greater than twenty-five years or seventy percent of the economic useful life of the unit determined as of the time the unit was built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(62) "Nameplate capacity" means the maximum electrical generating output (expressed in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings, as listed in the NADB under the data field "NAMECAP" if the generator is listed in the NADB or as measured in accordance with the United States Department of Energy standards if the generator is not listed in the NADB.

(63) "National Allowance Data Base or NADB" means the data base established by the administrator under section 402 (4)(C) of the act.

(64) "Natural person" means an individual human being and not a firm, public or private corporation, association, partnership, political subdivision, municipality, or governmental agency corporate entity or partnership.

(65) "Natural gas" means a naturally occurring fluid mixture of hydrocarbons containing little or no sulfur (e.g., methane, ethane, or propane), produced in geological formations beneath the Earth's surface, and maintaining a gaseous state at standard atmospheric temperature and pressure conditions under ordinary conditions of sixty-eight degrees Fahrenheit and one atmosphere (seven hundred sixty millimeters of mercury).

(66) "New unit" means a unit that commences commercial operation on or after November 15, 1990, including any such unit that serves a generator with a nameplate capacity of twenty-five MWe or less or that is a simple combustion turbine.

(67) "Offset plan" means a plan pursuant to 40 CFR part 77 for offsetting excess emissions of sulfur dioxide that have occurred at an affected unit in any calendar year.

(68) "Oil-fired" means the combustion of: Fuel oil for more than ten percent of the average annual heat input during the previous three calendar years or for more than fifteen percent of the annual heat input in any one of those calendar years; and any solid, liquid, or gaseous fuel, other than coal or any other coal-derived fuel (except a coal-derived gaseous fuel with a sulfur content no greater than natural gas), for the remaining heat input, if any.

(69) "Operating permit" means a permit issued under 40 CFR part 70 and any other regulations implementing Title V of the act.

(70) "Owner" means any of the following persons:

(a) Any holder of any portion of the legal or equitable title in an affected unit;

(b) Any holder of a leasehold interest in an affected unit; or

(c) Any purchaser of power from an affected unit under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the affected unit; or

(d) With respect to any allowance tracking system general account, any person identified in the submission required by 40 CFR 73.31(c) that is subject to the binding agreement

for the authorized account representative to represent that person's ownership interest with respect to allowances.

(71) "Owner or operator" means any person who is an owner or who operates, controls, or supervises an affected unit or affected source and shall include, but not be limited to, any holding company, utility system, or plant manager of an affected unit or affected source.

(72) "Permit revision" means a permit modification, fast track modification, administrative permit amendment, or automatic permit amendment, as provided in WAC 173-406-700.

(73) "Permitting authority" means the Washington department of ecology, the Washington energy facility site evaluation council, local air authority or other agency authorized under chapter 70.94 RCW and approved by EPA to carry out a permit program under this chapter.

(74) "Person" means an individual, firm, public or private corporation, association, partnership, political subdivision, municipality, or governmental agency.

(75) "Phase II" means the acid rain program period beginning January 1, 2000, and continuing into the future thereafter.

(76) "Potential electrical output capacity" means the MWe capacity rating for the units which shall be equal to thirty-three percent of the maximum design heat input capacity of the steam generating unit, as calculated according to Appendix D of 40 CFR part 72.

(77) "Power distribution system" means the portion of an electricity grid owned or operated by a utility that is dedicated to delivering electric energy to customers.

(78) "Power purchase commitment" means a commitment or obligation of a utility to purchase electric power from a facility pursuant to:

(a) A power sales agreement;

(b) A state regulatory authority order requiring a utility to:

(i) Enter into a power sales agreement with the facility;

(ii) Purchase from the facility; or

(iii) Enter into arbitration concerning the facility for the purpose of establishing terms and conditions of the utility's purchase of power;

(c) A letter of intent or similar instrument committing to purchase power (actual electrical output or generator output capacity) from the source at a previously offered or lower price and a power sales agreement applicable to the source is executed within the time frame established by the terms of the letter of intent but no later than November 15, 1992, or, where the letter of intent does not specify a time frame, a power sales agreement applicable to the source is executed on or before November 15, 1992; or

(d) A utility competitive bid solicitation that has resulted in the selection of the qualifying facility of independent power production facility as the winning bidder.

(79) "Power sales agreement" means a legally binding agreement between a qualifying facility, an independent power production facility, or firm associated with such facility and a regulated electric utility that establishes the terms and conditions for the sale of power from the facility to the utility.

(80) "Primary fuel or primary fuel supply" means the main fuel type (expressed in mmBtu) consumed by an affected unit for the applicable calendar year.

(81) "Proposed acid rain permit or proposed permit" means the version of an acid rain permit that the permitting authority submits to the administrator after the public comment period, but prior to completion of the EPA permit review period under 40 CFR 70.8(c).

(82) "Qualifying facility (QF)" means a "qualifying small power production facility" within the meaning of section 3 (17)(C) of the Federal Power Act or a "qualifying cogeneration facility" within the meaning of section 3 (18)(B) of the Federal Power Act.

(83) "Qualifying power purchase commitment" means a power purchase commitment in effect as of November 15, 1990, without regard to changes to that commitment so long as:

(a) The identity of the electric output purchaser, the identity of the steam purchaser and the location of the facility, remain unchanged as of the date the facility commences commercial operation; and

(b) The terms and conditions of the power purchase commitment are not changed in such a way as to allow the costs of compliance with the acid rain program to be shifted to the purchaser.

(84) "Qualifying repowering technology" means:

(a) Replacement of an existing coal-fired boiler with one of the following clean coal technologies: Atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990; or

(b) Any oil-fired or gas-fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(85) "Receive or receipt of" means the date the administrator or the permitting authority comes into possession of information or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the information or correspondence, by the administrator or the permitting authority in the regular course of business.

(86) "Recordation, record, or recorded" means, with regard to allowances, the transfer of allowances by the administrator from one allowance tracking system account or subaccount to another.

(87) "Schedule of compliance" means an enforceable sequence of actions, measures, or operations designed to achieve or maintain compliance, or correct noncompliance, with an applicable requirement of the acid rain program, including any applicable acid rain permit requirement.

(88) "Secretary of Energy" means the Secretary of the United States Department of Energy or the secretary's duly authorized representative.

(89) "Simple combustion turbine" means a unit that is a rotary engine driven by a gas under pressure that is created by the combustion of any fuel. This term includes combined cycle units without auxiliary firing. This term excludes combined cycle units with auxiliary firing, unless the unit did not use the auxiliary firing from 1985 through 1987 and does not use auxiliary firing at any time after November 15, 1990.

(90) "Solid waste incinerator" means a source as defined in section 129 (g)(1) of the act.

(91) "Source" means any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the act. For purposes of section 502(c) of the act, a "source," including a "source" with multiple units, shall be considered a single "facility."

(92) "Stack" means a structure that includes one or more flues and the housing for the flues.

(93) "State" means one of the forty-eight contiguous states and the District of Columbia and includes any nonfederal authorities, including local agencies, interstate associations, and statewide agencies with approved state operating permit programs. The term "state" shall have its conventional meaning where such meaning is clear from the context.

(94) "State operating permit program" means an operating permit program that the administrator has approved as meeting the requirements of Titles IV and V of the act and 40 CFR parts 70 and 72.

(95) "Submit or serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

(a) In person;

(b) By United States Postal Service certified mail with the official postmark or, if service is by the administrator or the permitting authority, by any other mail service by the United States Postal Service; or

(c) By other means with an equivalent time and date mark used in the regular course of business to indicate the date of dispatch or transmission and a record of prompt delivery. Compliance with any "submission," "service," or "mailing" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

(96) "Ton or tonnage" means any "short ton" (i.e., two thousand pounds). For the purpose of determining compliance with the acid rain emissions limitations and reduction requirements, total tons for a year shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with 40 CFR part 75, with any remaining fraction of a ton equal to or greater than one-half ton deemed to equal one ton and any fraction of a ton less than one-half ton deemed not to equal any ton.

(97) "Total planned net output capacity" means the planned generator output capacity, excluding that portion of the electrical power which is designed to be used at the power production facility, as specified under one or more qualifying power purchase commitments or contemporaneous documents as of November 15, 1990.

(98) "Total installed net output capacity" means the generator output capacity, excluding that portion of the electrical power actually used at the power production facility, as installed.

(99) "Unit" means a fossil fuel-fired combustion device.

(100) "Unit account" means an allowance tracking system account, established by the administrator for an affected unit pursuant to 40 CFR 73.31 (a) or (b).

(101) "Utility" means any person that sells electricity.

(102) "Utility competitive bid solicitation" means a public request from a regulated utility for offers to the utility for meeting future generating needs. A qualifying facility, independent power production facility may be regarded as having been "selected" in such solicitation if the utility has named the facility as a project with which the utility intends to negotiate a power sales agreement.

(103) "Utility regulatory authority" means an authority, board, commission, or other entity (limited to the local-level, state-level, or federal-level, whenever so specified) responsible for overseeing the business operations of utilities located within its jurisdiction, including, but not limited to, utility rates and charges to customers.

(104) "Utility unit" means a unit owned or operated by a utility:

(a) That serves a generator that produces electricity for sale; or

(b) That during 1985, served a generator that produced electricity for sale.

(c) Notwithstanding (a) and (b) of this subsection, a unit that was in operation during 1985, but did not serve a generator that produced electricity for sale during 1985, and did not commence commercial operation on or after November 15, 1990, is not a utility unit for purposes of the acid rain program.

(d) Notwithstanding (a) and (b) of this subsection, a unit that cogenerates steam and electricity is not a utility unit for purposes of the acid rain program, unless the unit is constructed for the purpose of supplying, or commences construction after November 15, 1990, and supplies, more than one-third of its potential electrical output capacity and more than twenty-five MWe output to any power distribution system for sale.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-101, filed 11/23/94, effective 12/24/94.]

WAC 173-406-102 Measurements, abbreviations, and acronyms. Measurements, abbreviations, and acronyms used in this regulation are defined as follows:

ASTM - American Society for Testing and Materials.
ATS - Allowance Tracking System.
Btu - British thermal unit.
CAAA - Clean Air Act Amendments.
CFR - Code of Federal Regulations.
DOE - Department of Energy.
IPP - Independent power production facility.
mmBtu - million Btu.
MWe - megawatt electrical.
NADB - National Allowance Data Base.
QF - Qualifying facility.
RCW - Revised Code of Washington.
SO_2 - sulfur dioxide.
WAC - Washington Administrative Code.

WDOE - Washington Department of Ecology, hereinafter referred to as ecology.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-102, filed 11/23/94, effective 12/24/94.]

WAC 173-406-103 Applicability. (1) The provisions of this chapter apply in all areas of the state of Washington. An authority may enforce this chapter and may also adopt more stringent standards or requirements. These standards or requirements may not be less stringent than the current state air quality rules and may be more stringent than the current regulations. Each of the following units shall be an affected unit, and any source that includes such a unit shall be an affected source, subject to the requirements of the acid rain program:

(a) A unit listed in Table 1 of 40 CFR 73.10(a).

(b) An existing unit that is identified in Table 2 or 3 of 40 CFR 73.10 and any other existing utility unit, except a unit under subsection (2) of this section.

(c) A utility unit, except a unit under subsection (2) of this section, that:

(i) Is a new unit;

(ii) Did not serve a generator with a nameplate capacity greater than twenty-five MWe on November 15, 1990, but serves such a generator after November 15, 1990;

(iii) Was a simple combustion turbine on November 15, 1990, but adds or uses auxiliary firing after November 15, 1990;

(iv) Was an exempt cogeneration facility under subsection (2)(d) of this section but during any three calendar year period after November 15, 1990, sold, to a utility power distribution system, an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand MWe-hrs (i.e., twenty-five MWe times eight thousand seven hundred sixty hours) electric output, on a gross basis;

(v) Was an exempt qualifying facility under subsection (2)(e) of this section but, at any time after the later of November 15, 1990, or the date the facility commences commercial operation, fails to meet the definition of qualifying facility;

(vi) Was an exempt independent power production facility under subsection (2)(f) of this section but, at any time after the later of November 15, 1990, or the date the facility commences commercial operation, fails to meet the definition of independent power production facility; or

(vii) Was an exempt solid waste incinerator under subsection (2)(g) of this section but during any three calendar year period after November 15, 1990, consumes twenty percent or more (on a Btu basis) fossil fuel.

(2) The following types of units are not affected units, and are not subject to the requirements of the acid rain program:

(a) A simple combustion turbine that commenced operation before November 15, 1990.

(b) Any unit that commenced commercial operation before November 15, 1990, and that did not, as of November 15, 1990, and does not currently, serve a generator with a nameplate capacity of greater than twenty-five MWe.

(c) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale.

(d) A cogeneration facility which:

(i) For a unit that commenced construction on or prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than two hundred nineteen thousand MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). If the purpose of construction is not known, it will be presumed to be consistent with the actual operation from 1985 through 1987. However, if in any three calendar year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the acid rain program; or

(ii) For units that commenced construction after November 15, 1990, supplies equal to or less than one-third its potential electrical output capacity or equal to or less than two hundred nineteen thousand MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). However, if in any three calendar year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the acid rain program.

(e) A qualifying facility that:

(i) Has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least fifteen percent of its total planned net output capacity; and

(ii) Consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding one hundred thirty percent of the total planned net output capacity. If the emissions rates of the units are not the same, the administrator may exercise discretion to designate which units are exempt.

(f) An independent power production facility that:

(i) Has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least fifteen percent of its total planned net output capacity; and

(ii) Consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding one hundred thirty percent of its total planned net output capacity. If the emissions rates of the units are not the same, the administrator may exercise discretion to designate which units are exempt.

(g) A solid waste incinerator, if more than eighty percent (on a Btu basis) of the annual fuel consumed at such incinerator is other than fossil fuels. For a solid waste incinerator which began operation before January 1, 1985, the average annual fuel consumption of nonfossil fuels for calendar years 1985 through 1987 must be greater than eighty percent for such an incinerator to be exempt. For a solid waste incinerator which began operation after January 1, 1985, the average annual fuel consumption of nonfossil fuels for the first three years of operation must be greater than eighty percent for

such an incinerator to be exempt. If, during any three calendar year period after November 15, 1990, such incinerator consumes twenty percent or more (on a Btu basis) fossil fuel, such incinerator will be an affected source under the acid rain program.

(h) A nonutility unit which is not a utility unit as defined at WAC 173-406-101.

(3) A certifying official of any unit may petition the administrator for a determination of applicability under 40 CFR 72.6(c). The administrator's determination of applicability shall be binding upon the permitting authority, unless the petition is found to have contained significant errors or omissions.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-103, filed 11/23/94, effective 12/24/94.]

WAC 173-406-104 New units exemption. (1) Applicability. This section applies to any new utility unit that serves one or more generators with total nameplate capacity of twenty-five MWe or less and burns only fuels with a sulfur content of five hundredths of one percent or less by weight, as determined in accordance with subsection (4)(a) of this section.

(2) Petition for written exemption. The designated representative, authorized in accordance with subpart B of 40 CFR part 72, of a source that includes a unit under subsection (1) of this section may petition the permitting authority for a written exemption, or to renew a written exemption, for the unit from certain requirements of the acid rain program. The petition shall be submitted on a form approved by the permitting authority which includes the following elements:

(a) Identification of the unit.

(b) The nameplate capacity of each generator served by the unit.

(c) A list of all fuels currently burned by the unit and their percentage sulfur content by weight, determined in accordance with subsection (1) of this section.

(d) A list of all fuels that are expected to be burned by the unit and their sulfur content by weight.

(e) The special provisions in subsection (4) of this section.

(f) The name of the designated representative, his or her signature, and the date of signature.

(3) The permitting authority's action.

(a)(i) The permitting authority will issue, for any unit meeting the requirements of subsections (1) and (2) of this section, a written exemption from the requirements of the acid rain program except for the requirements specified in this section, 40 CFR 72.2 through 72.7, and 40 CFR 72.10 through 72.13; provided that no unit shall be exempted unless the designated representative of the unit surrenders, and the administrator deducts from the unit's allowances tracking system account, allowances pursuant to 40 CFR 72.7 (c)(1)(i) and (d)(1).

(ii) The exemption shall take effect on January 1st of the year immediately following the date on which the written exemption is issued as a final agency action subject to judicial review, in accordance with subsection (3)(b) of this section; provided that the owners and operators, and, to the extent applicable, the designated representative, shall comply with the requirements of the acid rain program concerning all years for which the unit was not exempted, even if such requirements arise, or must be complied with, after the exemption takes effect. The exemption shall not be a defense against any violation of such requirements of the acid rain program whether the violation occurs before or after the exemption takes effect.

(b) The permitting authority will consider and either issue or deny a written exemption under subsection (3)(a) of this section by applying the procedures for acid rain permit issuance in WAC 173-406-600 as if the petition for written exemption were a permit application, with regard to completeness determination, draft written exemption, administrative record, statement of basis, public notice and comment period, public hearing, proposed written exemption, written exemption issuance, exemption revision and appeal procedures as provided by WAC 173-406-600 and 173-406-700. No provision under WAC 173-406-600 concerning the content, effective date, or term of an acid rain permit shall apply to the written exemption or proposed written exemption under this section.

(c) A written exemption issued under this section shall have a term of five years from its effective date, except as provided in subsection (4)(c) of this section.

(4) Special provisions.

(a) The owners and operators of each unit exempted under this section shall determine the sulfur content by weight of its fuel as follows:

(i) For petroleum or petroleum products that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D4057-88 and ASTM D129-91, ASTM D2622-92, or ASTM D4294-90.

(ii) For natural gas that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, the sulfur content shall be documented to be five hundredths of one percent or less by weight.

(iii) For gaseous fuel (other than natural gas) that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D1072-90 and ASTM D1265-92; provided that if the gaseous fuel is delivered by pipeline to the unit, a sample of the fuel shall be tested, at least once every quarter in which the unit operates during any year for which the exemption is in effect, using ASTM method ASTM D1072-90.

(b) The owners and operators of each unit exempted under this section shall retain at the source that includes the unit, the records of the results of the tests performed under (a)(i) and (iii) of this subsection, a copy of documentation produced under (a)(ii) of this subsection, and a copy of the purchase agreements for the fuel under (a) of this subsection, stating the sulfur content of such fuel. Such records and documents shall be retained for five years from the date they are created.

(c) On the earlier of the date the written exemption expires, the date a unit exempted under this section burns any fuel with a sulfur content in excess of five hundredths of one percent by weight (as determined in accordance with (a) of

this subsection), or twenty-four months prior to the date the unit first serves one or more generators with total nameplate capacity in excess of twenty-five MWe, the unit shall no longer be exempted under this section and shall be subject to all requirements of the acid rain program, except that:

(i) Notwithstanding WAC 173-406-301 (2) and (3), the designated representative of the source that includes the unit shall submit a complete acid rain permit application on the later of January 1, 1998, or the date the unit is no longer exempted under this section.

(ii) For purposes of applying monitoring requirements under 40 CFR part 75, the unit shall be treated as a new unit that commenced commercial operation on the date the unit no longer meets the requirements of subsection (1) of this section.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-104, filed 11/23/94, effective 12/24/94.]

WAC 173-406-105 Retired units exemption. (1) Applicability. This section applies to any affected unit that is retired prior to the issuance (including renewal) of an acid rain permit for the unit as a final agency action.

(2) Petition for written exemption.

(a) The designated representative, authorized in accordance with subpart B of 40 CFR part 72, of a source that includes a unit under subsection (1) of this section may petition the permitting authority for a written exemption, or to renew a written exemption, for the unit from certain requirements of the acid rain program.

(b) A petition under this section shall be submitted on or before:

(i) The deadline for submitting an acid rain permit application for Phase II; or

(ii) If the unit has a Phase II acid rain permit, the deadline for reapplying for such permit.

(c) The petition under this section shall be submitted on a form approved by the permitting authority which includes the following elements:

(i) Identification of the unit;

(ii) The applicable deadline under (b) of this subsection;

(iii) The actual or expected date of retirement of the unit;

(iv) The following statement: "I certify that this unit ('is' or 'will be', as applicable) permanently retired on the date specified in this petition and will not emit any sulfur dioxide or nitrogen oxides after such date";

(v) A description of any actions that have been or will be taken and provide the basis for the certification in (c)(iv) of this subsection; and

(vi) The special provisions in subsection (4) of this section.

(vii) The name of the designated representative, his or her signature, and the date of signature.

(3) Permitting authority's action.

(a)(i) The permitting authority will issue, for any unit meeting the requirements of subsections (1) and (2) of this section, a written exemption from the requirements of WAC 173-406-100 through 173-406-800 and 40 CFR part 72 except for the requirements specified in this section and 40 CFR 72.1 through 72.6, 40 CFR 72.8, and 40 CFR 72.10 through 72.13.

(ii) The exemption shall take effect on January 1st of the year following the date on which the written exemption is issued as a final agency action subject to judicial review, in accordance with (b) of this subsection; provided that the owners and operators, and, to the extent applicable, the designated representative, shall comply with the requirements of WAC 173-406-100 through 173-406-800 and 40 CFR part 72 concerning all years for which the unit was not exempted, even if such requirements arise or must be complied with after the exemption takes effect. The exemption shall not be a defense against any violation of such requirements of the acid rain program whether the violation occurs before or after the exemption takes effect.

(b) The permitting authority will consider and either issue or deny a written exemption under (a) of this subsection by applying the procedures for acid rain permit issuance in WAC 173-406-600 as if the petition for written exemption were a permit application, with regard to completeness determination, draft written exemption, administrative record, statement of basis, public notice and comment period, public hearing, proposed written exemption, written exemption issuance, exemption revision and appeal procedures as provided by WAC 173-406-600 and 173-406-700. No provision under WAC 173-406-600 concerning the content, effective date, or term of an acid rain permit shall apply to the written exemption or proposed written exemption under this section.

(c) A written exemption issued under this section shall have a term of five years, except as provided in subsection (4)(c) of this section.

(4) Special provisions.

(a) A unit exempted under this section shall not emit any sulfur dioxide and nitrogen dioxide starting on the date it is exempted.

(b) The owners and operators of a unit exempted under this section shall comply with monitoring requirements in accordance with 40 CFR part 75 and will be allocated allowances in accordance with 40 CFR part 73.

(c) A unit exempted under this section shall not resume operation unless the designated representative of the source that includes the unit submits an acid rain permit application for the unit not less than twenty-four months prior to the later of January 1, 2000, or the date the unit is to resume operation. On the earlier of the date the written exemption expires or the date an acid rain permit application is submitted or is required to be submitted under this paragraph, the unit shall no longer be exempted under this section and shall be subject to all requirements of WAC 173-406-100 through 173-406-800 and 40 CFR part 72.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-105, filed 11/23/94, effective 12/24/94.]

WAC 173-406-106 Standard requirements. (1) Permit requirements.

(a) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete acid rain permit application under this part in accordance with the deadlines specified in WAC 173-406-301;

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary

in order to review an acid rain permit application and issue or deny an acid rain permit.

(b) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete acid rain permit application or a superseding acid rain permit issued by the permitting authority; and

(ii) Have an acid rain permit.

(2) Monitoring requirements.

(a) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements pursuant to 40 CFR part 75 and section 407 of the act and regulations implementing section 407 of the act.

(b) The emissions measurements recorded and reported in accordance with 40 CFR part 75 and section 407 of the act and regulations implementing section 407 of the act shall be used to determine compliance by the unit with the acid rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the acid rain program.

(c) The requirements of 40 CFR part 75 and regulations implementing section 407 of the act shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the act, applicable requirements of Title 173 WAC, and other provisions of the operating permit for the source.

(3) Sulfur dioxide requirements.

(a) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable acid rain emissions limitation for sulfur dioxide.

(b) Each ton of sulfur dioxide emitted in excess of the acid rain emissions limitations for sulfur dioxide shall constitute a separate violation of the act.

(c) An affected unit shall be subject to the requirements under (a) of this subsection as follows:

(i) Starting January 1, 2000, an affected unit under WAC 173-406-103 (1)(b); or

(ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR part 75, an affected unit under WAC 173-406-103 (1)(c).

(d) Allowances shall be held in, deducted from, or transferred among allowance tracking system accounts in accordance with the acid rain program.

(e) An allowance shall not be deducted, in order to comply with the requirements under (a)(i) of this subsection, prior to the calendar year for which the allowance was allocated.

(f) An allowance allocated by the administrator under the acid rain program is a limited authorization to emit sulfur dioxide in accordance with the acid rain program. No provision of the acid rain program, the acid rain permit application, the acid rain permit, or the written exemption under WAC 173-406-104 and 173-406-105 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(g) An allowance allocated by the administrator under the acid rain program does not constitute a property right.

(4) Nitrogen oxides requirements. The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitation for nitrogen oxides.

(5) Excess emissions requirements.

(a) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan to the administrator, as required under 40 CFR part 77, and submit a copy to the permitting authority.

(b) The owners and operators of an affected unit that has excess emissions in any calendar year shall:

(i) Pay to the administrator without demand the penalty required, and pay to the administrator upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

(6) Recordkeeping and reporting requirements.

(a) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created.

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the acid rain program.

(iv) Copies of all documents used to complete an acid rain permit application and any other submission under the acid rain program or to demonstrate compliance with the requirements of the acid rain program.

(b) The five-year document retention period in (a) of this subsection may be extended for cause, at any time prior to the end of five years, in writing by the administrator or the permitting authority.

(c) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the acid rain program, including those under WAC 173-406-800 and 40 CFR part 75.

(7) Liability.

(a) Any person who knowingly violates any requirement or prohibition of the acid rain program, a complete acid rain permit application, an acid rain permit, or a written exemption under WAC 173-406-104 or 173-406-105, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by the admin-

istrator pursuant to section 113(c) of the act and by the permitting authority pursuant to RCW 70.94.431 and 70.94.435.

(b) Any person who knowingly makes a false, material statement in any record, submission, or report under the acid rain program shall be subject to criminal enforcement by the administrator pursuant to section 113(c) of the act and 18 U.S.C. 1001 and by the permitting authority pursuant to RCW 70.94.430.

(c) No permit revision shall excuse any violation of the requirements of the acid rain program that occurs prior to the date that the revision takes effect.

(d) Each affected source and each affected unit shall meet the requirements of the acid rain program.

(e) Any provision of the acid rain program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(f) Any provision of the acid rain program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under WAC 173-406-402 (Phase II repowering extension plans), section 407 of the act and regulations implementing section 407 of the act, and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(g) Each violation of a provision of WAC 173-406-100 through 173-406-1000 and 40 CFR parts 72, 73, 75, 77, and 78, and regulations implementing sections 407 and 410 of the act by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the act.

(8) Effect on other authorities. No provision of the acid rain program, an acid rain permit application, an acid rain permit, or a written exemption under WAC 173-406-104 or 173-406-105 shall be construed as:

(a) Except as expressly provided in Title IV of the act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the act, including the provisions of Title I of the act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the act;

(c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;

(d) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or

(e) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-106, filed 11/23/94, effective 12/24/94.]

PART II
DESIGNATED REPRESENTATIVE

WAC 173-406-200 Designated representative.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-200, filed 11/23/94, effective 12/24/94.]

WAC 173-406-201 Submissions. (1) The designated representative shall submit a certificate of representation, and any superseding certificate of representation, to the administrator in accordance with subpart B of 40 CFR part 72 and, concurrently, shall submit a copy to the permitting authority. Whenever the term "designated representative" is used in this regulation, the term shall be construed to include the alternate designated representative.

(2) Each submission under the acid rain program shall be submitted, signed, certified and dated by the designated representative for all sources on behalf of which the submission is made.

(3) In each submission under the acid rain program, the designated representative shall certify, by his or her signature:

(a) The following statement, which shall be included verbatim in such submission: "I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made."

(b) The following statement, which shall be included verbatim in such submission: "I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(4) The permitting authority will accept or act on a submission made on behalf of owners or operators of an affected source and an affected unit only if the submission has been made, signed, and certified in accordance with subsections (2) and (3) of this section.

(5)(a) The designated representative of a source shall serve notice on each owner and operator of the source and of an affected unit at the source:

(i) By the date of submission, of any acid rain program submissions by the designated representative;

(ii) Within ten business days of receipt of a determination, of any written determination by the administrator or the permitting authority; and

(iii) Provided that the submission or determination covers the source or the unit.

(b) The designated representative of a source shall provide each owner and operator of an affected unit at the source a copy of any submission or determination under (a) of this subsection, unless the owner or operator expressly waives the right to receive such a copy.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-201, filed 11/23/94, effective 12/24/94.]

WAC 173-406-202 Objections. (1) Except as provided in 40 CFR 72.23, no objection or other communication submitted to the administrator or the permitting authority concerning the authorization, or any submission, action or inaction, of the designated representative shall affect any submission, action, or inaction of the designated representative, or the finality of any decision by the permitting authority, under the acid rain program. In the event of such communication, the permitting authority is not required to stay any submission or the effect of any action or inaction under the acid rain program.

(2) The permitting authority will not adjudicate any private legal dispute concerning the authorization or any submission, action, or inaction of any designated representative, including private legal disputes concerning the proceeds of allowance transfers.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-202, filed 11/23/94, effective 12/24/94.]

PART III
APPLICATIONS

WAC 173-406-300 Acid rain permit applications.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-300, filed 11/23/94, effective 12/24/94.]

WAC 173-406-301 Requirement to apply. (1) Duty to apply. The designated representative of any source with an affected unit shall submit a complete acid rain permit application by the applicable deadline in subsections (2) and (3) of this section, and the owners and operators of such source and any affected unit at the source shall not operate the source or unit without a permit that states its Acid Rain Program requirements.

(2) Deadlines.

(a) For any source with an existing unit described under WAC 173-406-103 (1)(b), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority on or before January 1, 1996.

(b) For any source with a new unit described under WAC 173-406-103 (1)(c)(i), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority at least twenty-four months before the later of January 1, 2000, or the date on which the unit commences operation.

(c) For any source with a unit described under WAC 173-406-103 (1)(c)(ii), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority at least twenty-four months before the later of January 1, 2000, or the date on which the unit begins to serve a generator with a nameplate capacity greater than twenty-five MWe.

(d) For any source with a unit described under WAC 173-406-103 (1)(c)(iii), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority at least twenty-four months before the later of January 1, 2000, or the date on which the auxiliary firing commences operation.

(e) For any source with a unit described under WAC 173-406-103 (1)(c)(iv), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority before the later of January 1, 1998, or March 1st of the year following the three calendar year period in which the unit sold to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand MWe-hrs actual electric output (on a gross basis).

(f) For any source with a unit described under WAC 173-406-103 (1)(c)(v), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority before the later of January 1, 1998, or March 1st of the year following the calendar year in which the facility fails to meet the definition of qualifying facility.

(g) For any source with a unit described under WAC 173-406-103 (1)(c)(vi), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority before the later of January 1, 1998, or March 1st of the year following the calendar year in which the facility fails to meet the definition of an independent power production facility.

(h) For any source with a unit described under WAC 173-406-103 (1)(c)(vii), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority before the later of January 1, 1998, or March 1st of the year following the three calendar year period in which the incinerator consumed twenty percent or more fossil fuel (on a Btu basis).

(3) Duty to reapply. The designated representative shall submit a complete acid rain permit application for each source with an affected unit at least six months or more but not to exceed eighteen months, as may be approved by the permitting authority, prior to the expiration of an existing acid rain permit governing the unit to ensure that the existing acid rain permit does not expire prior to renewal.

(4) The original and three copies of all permit applications shall be submitted to the permitting authority.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-301, filed 11/23/94, effective 12/24/94.]

WAC 173-406-302 Information requirements for acid rain permit applications. Complete permit application. A complete acid rain permit application shall be submitted on

a form approved by the permitting authority, which includes the following elements:

(1) Identification of the affected source for which the permit application is submitted;

(2) Identification of each affected unit at the source for which the permit application is submitted;

(3) A complete compliance plan for each unit, in accordance with WAC 173-406-400;

(4) The standard requirements under WAC 173-406-106;

(5) If the unit is a new unit, the date that the unit has commenced or will commence operation and the deadline for monitor certification; and

(6) The name of the designated representative, his or her signature, and the date of signature.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-302, filed 11/23/94, effective 12/24/94.]

WAC 173-406-303 Permit application shield and binding effect of permit application. Permit application shield.

(1) Once a designated representative submits a timely and complete acid rain permit application, the owners and operators of the affected source and the affected units covered by the permit application shall be deemed in compliance with the requirement to have an acid rain permit under WAC 173-406-106 (1)(b) and 173-406-301(1); provided that any delay in issuing an acid rain permit is not caused by the failure of the designated representative to submit in a complete and timely fashion supplemental information, as required by the permitting authority, necessary to issue a permit.

(2) Prior to the date on which an acid rain permit is issued as a final agency action subject to judicial review, an affected unit governed by and operated in accordance with the terms and requirements of a timely and complete acid rain permit application shall be deemed to be operating in compliance with the acid rain program.

(3) A complete acid rain permit application shall be binding on the owners and operators and the designated representative of the affected source and the affected units covered by the permit application and shall be enforceable as an acid rain permit from the date of submission of the permit application until the issuance or denial of such permit as a final agency action subject to judicial review.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-303, filed 11/23/94, effective 12/24/94.]

PART IV
COMPLIANCE PLAN

WAC 173-406-400 Acid rain compliance plan and compliance options.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-400, filed 11/23/94, effective 12/24/94.]

WAC 173-406-401 General. (1) For each affected unit included in an acid rain permit application, a complete compliance plan shall include:

(a) For sulfur dioxide emissions, a certification that, as of the allowance transfer deadline, the designated representative will hold allowances in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide from the unit. The compliance plan may also specify, in accordance with WAC 173-406-400, one or more of the acid rain compliance options.

(b) For nitrogen oxides emissions, a certification that the unit will comply with the applicable limitation established by regulations implementing section 407 of the act or shall specify one or more acid rain compliance options, in accordance with section 407 of the act and regulations implementing section 407.

(2) The compliance plan may include a multi-unit compliance option under WAC 173-406-402 or section 407 of the act or regulations implementing section 407.

(a) A plan for a compliance option that includes units at more than one affected source shall be complete only if:

(i) Such plan is signed, certified and dated by the designated representative for each source with an affected unit governed by such plan; and

(ii) A complete permit application is submitted covering each unit governed by such plan.

(b) The permitting authority's approval of a plan under (a) of this subsection that includes units in more than one state shall be final only after every permitting authority with jurisdiction over any such unit has approved the plan with the same modifications or conditions, if any.

(3) Conditional approval. In the compliance plan, the designated representative of an affected unit may propose, in accordance with WAC 173-406-400, any acid rain compliance option for conditional approval; provided that an acid rain compliance option under section 407 of the act may be conditionally proposed only to the extent provided in regulations implementing section 407 of the act.

(a) To activate a conditionally approved acid rain compliance option, the designated representative shall notify the permitting authority in writing that the conditionally approved compliance option will actually be pursued beginning January 1st of a specified year. Such notification shall be subject to the limitations on activation under WAC 173-406-402 and regulations implementing section 407 of the act. If the conditionally approved compliance option includes a plan described in subsection (2)(a) of this section, the designated representative of each source governed by the plan shall sign and certify the notification.

(b) The notification under subsection (3)(a) of this section shall specify the first calendar year and the last calendar year for which the conditionally approved acid rain compliance option is to be activated. A conditionally approved compliance option shall not be activated after the date of any enforceable milestone applicable to the compliance option. The date of activation of the compliance option shall not be a defense against failure to meet the requirements applicable to that compliance option during each calendar year for which the compliance option is activated.

(c) Upon submission of a notification meeting the requirements of (a) and (b) of this subsection, the conditionally approved acid rain compliance option becomes binding

on the owners and operators and the designated representative of any unit governed by the conditionally approved compliance option.

(d) A notification meeting the requirements of (a) and (b) of this subsection will revise the unit's permit in accordance with WAC 173-406-704 (administrative permit amendment).

(4) Termination of compliance option.

(a) The designated representative for a unit may terminate an acid rain compliance option by notifying the permitting authority in writing that an approved compliance option will be terminated beginning January 1st of a specified year. Such notification shall be subject to the limitations on termination under WAC 173-406-402 and regulations implementing section 407 of the act. If the compliance option includes a plan described in subsection (2)(a) of this section, the designated representative for each source governed by the plan shall sign and certify the notification.

(b) The notification under (a) of this subsection shall specify the calendar year for which the termination will take effect.

(c) Upon submission of a notification meeting the requirements of (a) and (b) of this subsection, the termination becomes binding on the owners and operators and the designated representative of any unit governed by the acid rain compliance option to be terminated.

(d) A notification meeting the requirements of (a) and (b) of this subsection will revise the unit's permit in accordance with WAC 173-406-704 (administrative permit amendment).

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-401, filed 11/23/94, effective 12/24/94.]

WAC 173-406-402 Repowering extensions. (1) Applicability.

(a) This section shall apply to the designated representative of:

(i) Any existing affected unit that is a coal-fired unit and has a 1985 actual SO_2 emissions rate equal to or greater than one and two tenths lbs/mmBtu; or

(ii) Any new unit that will be a replacement unit, as provided in subsection (2)(b) of this section, for a unit meeting the requirements of (a)(i) of this subsection; or

(iii) Any oil and/or gas-fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Secretary of Energy.

(b) A repowering extension does not exempt the owner or operator for any unit governed by the repowering plan from the requirement to comply with such unit's acid rain emissions limitations for sulfur dioxide.

(2) The designated representative of any unit meeting the requirements of subsection (1)(a)(i) of this section may include in the unit's acid rain permit application a repowering extension plan that includes a demonstration that:

(a) The unit will be repowered with a qualifying repowering technology in order to comply with the emissions limitations for sulfur dioxide; or

(b) The unit will be replaced by a new utility unit that has the same designated representative and that is located at a different site using a qualified repowering technology and the existing unit will be permanently retired from service on or before the date on which the new utility unit commences commercial operation.

(3) In order to apply for a repowering extension, the designated representative of a unit under subsection (1) of this section shall:

(a) Submit to the permitting authority, by January 1, 1996, a complete repowering extension plan;

(b) Submit to the administrator before June 1, 1997, a complete petition for approval of repowering technology in accordance with 40 CFR 72.44(d) and submit a copy to the permitting authority; and

(c) If the repowering extension plan is submitted for conditional approval, submit to the permitting authority by December 31, 1997, a notification to activate the plan in accordance with WAC 173-406-401(3).

(4) Contents of repowering extension plan. A complete repowering extension plan shall include the following elements:

(a) Identification of the existing unit governed by the plan.

(b) The unit's federally approved state implementation plan sulfur dioxide emissions limitation.

(c) The unit's 1995 actual SO_2 emissions rate, or best estimate of the actual emissions rate; provided that the actual emissions rate is submitted to the permitting authority by January 30, 1996.

(d) A schedule for construction, installation, and commencement of operation of the repowering technology approved or submitted for approval under 40 CFR 72.44(d) with dates for the following milestones:

(i) Completion of design engineering;

(ii) For a plan under subsection (2)(a) of this section, removal of the existing unit from operation to install the qualified repowering technology;

(iii) Commencement of construction;

(iv) Completion of construction;

(v) Start-up testing;

(vi) For a plan under subsection (2)(b) of this section, shutdown of the existing unit; and

(vii) Commencement of commercial operation of the repowering technology.

(e) For a plan under subsection (2)(b) of this section:

(i) Identification of the new unit. A new unit shall not be included in more than one repowering extension plan.

(ii) Certification that the new unit will replace the existing unit.

(iii) Certification that the new unit has the same designated representative as the existing unit.

(iv) Certification that the existing unit will be permanently retired from service on or before the date the new unit commences commercial operation.

(f) The special provisions of subsection (7) of this section.

(5) The permitting authority's action on repowering extension plan.

(a) The permitting authority will not approve a repowering extension plan until the administrator makes a conditional determination that the technology is a qualified repowering technology, unless the permitting authority approves such

plan subject to the conditional determination of the administrator.

(b) Permit issuance.

(i) Upon a conditional determination by the administrator that the technology to be used in the repowering extension plan is a qualified repowering technology and a determination by the permitting authority that such plan meets the requirements of this section, the permitting authority will issue the acid rain portion of the operating permit including:

(A) The approved repowering extension plan; and

(B) A schedule of compliance with enforceable milestones for construction, installation, and commencement of operation of the repowering technology and other requirements necessary to ensure that emission reduction requirements under this section will be met.

(ii) Except as otherwise provided in subsection (6) of this section, the repowering extension shall be in effect starting January 1, 2000, and ending on the day before the date (specified in the acid rain permit) on which the existing unit will be removed from operation to install the qualifying repowering technology or will be permanently removed from service for replacement by a new unit with such technology; provided that the repowering extension shall end no later than December 31, 2003.

(iii) The portion of the operating permit specifying the repowering extension and other requirements under (b)(i) of this subsection shall be subject to the administrator's final determination, under 40 CFR 72.44 (d)(4), that the technology to be used in the repowering extension plan is a qualifying repowering technology.

(c) Allowance allocation. Allowances will be allocated in accordance with 40 CFR 72.44 (f)(3) and (g).

(6) Failed repowering projects.

(a)(i) If, at any time before the end of the repowering extension under subsection (5)(b)(ii) of this section, the designated representative of a unit governed by an approved repowering extension plan submits the notification under WAC 173-406-802(4) that the owners and operators have decided to terminate efforts to properly design, construct, and test the repowering technology specified in the plan before completion of construction or start-up testing, the designated representative may submit to the permitting authority a proposed permit modification demonstrating that such efforts were in good faith. If such demonstration is to the satisfaction of the administrator, the unit shall not be deemed in violation of the act because of such a termination and the permitting authority will revise the operating permit in accordance with (a)(ii) of this subsection.

(ii) Regardless of whether notification under (a)(i) of this subsection is given, the repowering extension will end beginning on the earlier of the date of such notification or the date by which the designated representative was required to give such notification under WAC 173-406-802(4).

(b) The designated representative of a unit governed by an approved repowering extension plan may submit to the permitting authority a proposed permit modification demonstrating that the repowering technology specified in the plan was properly constructed and tested on such unit but was unable to achieve the emissions reduction limitations specified in the plan and that it is economically or technologically infeasible to modify the technology to achieve such limits. In order to be properly constructed and tested, the repowering technology shall be constructed at least to the extent necessary for direct testing of the multiple combustion emissions (including sulfur dioxide and nitrogen oxides) from such unit while operating the technology at nameplate capacity. If such demonstration is to the satisfaction of the administrator.

(i) The unit shall not be deemed in violation of the act because of such failure to achieve the emissions reduction limitations;

(ii) The permitting authority will revise the acid rain portion of the operating permit in accordance with the following:

(A) The existing unit may be retrofitted or repowered with another clean coal or other available control technology; and

(B) The repowering extension will continue in effect until the earlier of the date the existing unit commences commercial operation with such control technology or December 31, 2003.

(7) Special provisions.

(a) Emissions limitations.

(i) Sulfur dioxide. Allowances allocated during the repowering extension under subsections (5)(c) and (6) of this section to a unit governed by an approved repowering extension plan shall not be transferred to any allowance tracking system account other than the unit accounts of other units at the same source as that unit.

(ii) Nitrogen oxides. Any existing unit governed by an approved repowering extension plan shall be subject to the acid rain emissions limitations for nitrogen oxides in accordance with section 407 of the act and regulations implementing section 407 of the act beginning on the date that the unit is removed from operation to install the repowering technology or is permanently removed from service.

(iii) No existing unit governed by an approved repowering extension plan shall be eligible for a waiver under section 111(j) of the act.

(iv) No new unit governed by an approved repowering extension plan shall receive an exemption from the requirements imposed under section 111 of the act.

(b) Reporting requirements. Each unit governed by an approved repowering extension plan shall comply with the special reporting requirements of WAC 173-406-802.

(c) Liability.

(i) The owners and operators of a unit governed by an approved repowering plan shall be liable for any violation of the plan or this section at that or any other unit governed by the plan.

(ii) The units governed by the plan under subsection (2)(b) of this section shall continue to have a common designated representative until the existing unit is permanently retired under the plan.

(d) Terminations. Except as provided in subsection (6) of this section, a repowering extension plan shall not be terminated after December 31, 1999.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-402, filed 11/23/94, effective 12/24/94.]

PART V
PERMIT CONTENTS

WAC 173-406-500 Acid rain permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-500, filed 11/23/94, effective 12/24/94.]

WAC 173-406-501 Contents. (1) Each acid rain permit (including any draft or proposed acid rain permit) will contain the following elements:

(a) All elements required for a complete acid rain permit application under WAC 173-406-302, as approved or adjusted by the permitting authority;

(b) The applicable acid rain emissions limitation for sulfur dioxide; and

(c) The applicable acid rain emissions limitation for nitrogen oxides.

(2) Each acid rain permit is deemed to incorporate the definitions of terms under WAC 173-406-101 unless expressly otherwise defined in the permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-501, filed 11/23/94, effective 12/24/94.]

WAC 173-406-502 Permit shield. Each affected unit operated in accordance with the acid rain permit that governs the unit and that was issued in compliance with Title IV of the act, as provided in WAC 173-406-100 through 173-406-800, 40 CFR parts 72, 73, 75, 77, and 78, and the regulations implementing section 407 of the act, shall be deemed to be operating in compliance with the Acid Rain Program, except as provided in WAC 173-406-106 (7)(f).

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-502, filed 11/23/94, effective 12/24/94.]

PART VI
PERMIT ISSUANCE

WAC 173-406-600 Acid rain permit issuance procedures.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-600, filed 11/23/94, effective 12/24/94.]

WAC 173-406-601 General. The permitting authority will issue or deny all acid rain permits in accordance with chapter 173-401 WAC, including the completeness determination, draft permit, administrative record, statement of basis, public notice and comment period, public hearing, proposed permit, permit issuance, permit revision, and appeal procedures as provided by WAC 173-406-600 and 173-406-700.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-601, filed 11/23/94, effective 12/24/94.]

WAC 173-406-602 Completeness. The permitting authority will submit a written notice of application completeness to the administrator and the designated representative within ten working days following a determination by the permitting authority that the acid rain permit application is complete.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-602, filed 11/23/94, effective 12/24/94.]

WAC 173-406-603 Statement of basis. (1) The statement of basis will briefly set forth significant factual, legal, and policy considerations on which the permitting authority relied in issuing or denying the draft permit.

(2) The statement of basis will include the reasons, and supporting authority, for approval or disapproval of any compliance options requested in the permit application, including references to applicable statutory or regulatory provisions and to the administrative record.

(3) The permitting authority will submit to the administrator a copy of the draft acid rain permit and the statement of basis and all other relevant portions of the operating permit that may affect the draft acid rain permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-603, filed 11/23/94, effective 12/24/94.]

WAC 173-406-604 Issuance of acid rain permits. (1) Proposed permit. After the close of the public comment period and within eighteen months of receipt of a complete application, the permitting authority will incorporate all necessary changes and issue or deny a proposed acid rain permit.

(2) The permitting authority will submit the proposed acid rain permit or denial of a proposed acid rain permit to the administrator in accordance with WAC 173-401-810 and 173-401-820, the provisions of which shall be treated as applying to the issuance or denial of a proposed acid rain permit.

(3)(a) Following the administrator's review of the proposed acid rain permit or denial of a proposed acid rain permit, the permitting authority will incorporate any required changes and issue, or deny the acid rain permit in accordance with WAC 173-406-500.

(b) No acid rain permit (including a draft or proposed permit) shall be issued unless the administrator has received a certificate of representation for the designated representative of the source as provided in WAC 173-406-201 in accordance with subpart B of 40 CFR part 72.

(4) Permit issuance deadline and effective date.

(a) On or before December 31, 1997, the permitting authority will issue an acid rain permit to each affected source whose designated representative submitted a timely and complete acid rain permit application by January 1, 1996, in accordance with WAC 173-406-201 and meets the requirements of WAC 173-406-600 and chapter 173-401 WAC.

(b) Nitrogen oxides. Not later than January 1, 1999, the permitting authority will reopen the acid rain permit to add the Acid Rain Program nitrogen oxides requirements; provided that the designated representative of the affected source submitted a timely and complete acid rain permit application for nitrogen oxides in accordance with WAC 173-406-201. Such reopening shall not affect the term of the acid rain portion of an operating permit.

(c) Each acid rain permit issued in accordance with (a) of this subsection shall take effect by the later of January 1, 2000, or, where the permit governs a unit under WAC 173-406-103 (1)(c), the deadline for monitor certification under 40 CFR part 75.

(d) Each acid rain permit shall have a term of five years commencing on its effective date, except to the extent provided under 40 CFR part 72 that the initial issuance may have a shorter period in order to provide coordination with chapter 173-401 WAC permit requirements.

(e) An acid rain permit shall be binding on any new owner or operator or designated representative of any source or unit governed by the permit.

(5)(a) Each acid rain permit shall contain all applicable acid rain requirements, shall be a portion of the operating permit that is complete and segregable from all other air quality requirements, and shall not incorporate information contained in any other documents, other than documents that are readily available.

(b) Invalidation of the acid rain portion of an operating permit shall not affect the continuing validity of the rest of the operating permit, nor shall invalidation of any other portion of the operating permit affect the continuing validity of the acid rain portion of the permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-604, filed 11/23/94, effective 12/24/94.]

WAC 173-406-605 Acid rain permit appeal procedures. (1) Appeals of the acid rain portion of an operating permit issued by the permitting authority that do not challenge or involve decisions or actions of the administrator under 40 CFR part 72, 73, 75, 77 and 78 and sections 407 and 410 of the act and regulations implementing sections 407 and 410 shall be conducted according to the procedures in chapter 43.21 RCW. Appeals of the acid rain portion of such a permit that challenge or involve such decisions or actions of the administrator shall follow the procedures under 40 CFR part 78 and section 307 of the act. Such decisions or actions include, but are not limited to, allowance allocations, determinations concerning alternative monitoring systems, and determinations of whether a technology is a qualifying repowering technology.

(2) No administrative appeal or judicial appeal of the acid rain portion of an operating permit shall be allowed more than thirty days following respectively issuance of the acid rain portion that is subject to administrative appeal or issuance of the final agency action subject to judicial appeal.

(3) The administrator may intervene as a matter of right in any state administrative appeal of an acid rain permit or denial of an acid rain permit.

(4) No administrative appeal concerning an acid rain requirement shall result in a stay of the following requirements:

(a) The allowance allocations for any year during which the appeal proceeding is pending or is being conducted;

(b) Any standard requirement under WAC 173-406-106;

(c) The emissions monitoring and reporting requirements applicable to the affected units at an affected source under 40 CFR part 75;

(d) Uncontested provisions of the decision on appeal; and

(e) The terms of a certificate of representation submitted by a designated representative under subpart B of 40 CFR part 72.

(5) The permitting authority will serve written notice on the administrator of any state administrative or judicial appeal concerning an acid rain provision of any operating permit or denial of an acid rain portion of any operating permit within thirty days of the filing of the appeal.

(6) The permitting authority will serve written notice on the administrator of any determination or order in a state administrative or judicial proceeding that interprets, modifies, voids, or otherwise relates to any portion of an acid rain permit. Following any such determination or order, the administrator will have an opportunity to review and veto the acid rain permit or revoke the permit for cause in accordance with WAC 173-401-810 and 173-401-820.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-605, filed 11/23/94, effective 12/24/94.]

PART VII
PERMIT REVISIONS

WAC 173-406-700 Permit revisions.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-700, filed 11/23/94, effective 12/24/94.]

WAC 173-406-701 General. (1) WAC 173-406-700 shall govern revisions to any acid rain permit issued by the permitting authority.

(2) A permit revision may be submitted for approval at any time. No permit revision shall affect the term of the acid rain permit to be revised. No permit revision shall excuse any violation of an Acid Rain Program requirement that occurred prior to the effective date of the revision.

(3) The terms of the acid rain permit shall apply while the permit revision is pending.

(4) Any determination or interpretation by state (including the permitting authority or a state court) modifying or voiding any acid rain permit provision shall be subject to review by the administrator in accordance with WAC 173-401-810 and 173-401-820 as applied to permit modifications, unless the determination or interpretation is an administrative amendment approved in accordance with WAC 173-406-704.

(5) The standard requirements of WAC 173-406-106 shall not be modified or voided by a permit revision.

(6) Any permit revision involving incorporation of a compliance option that was not submitted for approval and comment during the permit issuance process, or involving a change in a compliance option that was previously submitted, shall meet the requirements for applying for such compliance option under WAC 173-406-402 and section 407 of the act and regulations implementing section 407 of the act.

(7) For permit revisions not described in WAC 173-406-702 and 173-406-703, the permitting authority may, in its discretion, determine which of these sections is applicable.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-701, filed 11/23/94, effective 12/24/94.]

WAC 173-406-702 Permit modifications. (1)(a) Permit modifications shall follow the permit issuance requirements of WAC 173-406-600, 173-401-810 and 173-401-820.

(b) For purposes of applying (a) of this subsection, a permit modification shall be treated as an acid rain permit application, to the extent consistent with WAC 173-406-700.

(2) The following permit revisions are permit modifications:

(a) Relaxation of an excess emission offset requirement after approval of the offset plan by the administrator;

(b) Incorporation of a final nitrogen oxides alternative emission limitation following a demonstration period;

(c) Determinations concerning failed repowering projects under WAC 173-406-402 (6)(a)(i) and (b); and

(d) At the option of the designated representative submitting the permit revision, the permit revisions listed in WAC 173-406-703(2).

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-702, filed 11/23/94, effective 12/24/94.]

WAC 173-406-703 Fast-track modifications. (1) Fast-track modifications shall follow the following procedures:

(a) The designated representative shall serve a copy of the fast-track modification on the administrator, the permitting authority, and any person entitled to a written notice under WAC 173-401-800. Within five business days of serving such copies, the designated representative shall also give public notice by publication in a newspaper of general circulation in the area where the source is located or in a state publication designed to give general public notice.

(b) The public shall have a period of thirty days, commencing on the date of publication of the notice, to comment on the fast-track modification. Comments shall be submitted in writing to the permitting authority and to the designated representative.

(c) The designated representative shall submit the fast-track modification to the permitting authority on or before commencement of the public comment period.

(d) Within thirty days of the close of the public comment period, the permitting authority will consider the fast-track modification and the comments received and approve or disapprove, in whole or in part or with changes or conditions as appropriate, or disapprove the modification. A fast-track modification shall be effective immediately upon issuance, in accordance with WAC 173-401-810 as applied to significant modifications.

(2) The following permit revisions are, at the option of the designated representative submitting the permit revision, either fast-track modifications under this section or permit modifications under WAC 173-406-702:

(a) Incorporation of a compliance option that the designated representative did not submit for approval and comment during the permit issuance process;

(b) Addition of a nitrogen oxides averaging plan to a permit; and

(c) Changes in a repowering plan, nitrogen oxides averaging plan, or nitrogen oxides compliance deadline extension.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-703, filed 11/23/94, effective 12/24/94.]

WAC 173-406-704 Administrative permit amendment. (1) Administrative amendments shall follow the procedures set forth at WAC 173-401-720. The permitting authority will submit the revised portion of the permit to the administrator within ten working days after the date of final action on the request for an administrative amendment.

(2) The following permit revisions are administrative amendments:

(a) Activation of a compliance option conditionally approved by the permitting authority; provided that all requirements for activation under WAC 173-406-401(3) and 173-406-402 are met;

(b) Changes in the designated representative or alternative designated representative; provided that a new certificate of representation is submitted to the administrator in accordance with subpart B of 40 CFR part 72;

(c) Correction of typographical errors;

(d) Changes in names, addresses, or telephone or facsimile numbers;

(e) Changes in the owners or operators; provided that a new certificate of representation is submitted within thirty days to the administrator in accordance with subpart B of 40 CFR part 72;

(f) Termination of a compliance option in the permit; provided that all requirements for termination under WAC 173-406-401(4) shall be met and this procedure shall not be used to terminate a repowering plan after December 31, 1999;

(g) Changes in the date, specified in a new unit's acid rain permit, of commencement of operation or the deadline for monitor certification, provided that they are in accordance with WAC 173-406-106;

(h) The addition of or change in a nitrogen oxides alternative emissions limitation demonstration period, provided that the requirements of regulations implementing section 407 of the act are met; and

(i) Incorporation of changes that the administrator has determined to be similar to those in (a) through (h) of this subsection.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-704, filed 11/23/94, effective 12/24/94.]

WAC 173-406-705 Automatic permit amendment. The following permit revisions shall be deemed to amend automatically, and become a part of the affected unit's acid rain permit by operation of law without any further review:

(1) Upon recordation by the administrator under 40 CFR part 73, all allowance allocations to, transfers to, and deductions from an affected unit's allowance tracking system account; and

(2) Incorporation of an offset plan that has been approved by the administrator under 40 CFR part 77.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-705, filed 11/23/94, effective 12/24/94.]

WAC 173-406-706 Permit reopenings. (1) As provided in WAC 173-401-730, the permitting authority will reopen an acid rain permit for cause, including whenever additional requirements become applicable to any affected unit governed by the permit.

(2) In reopening an acid rain permit for cause, the permitting authority will issue a draft permit changing the provi-

sions, or adding the requirements, for which the reopening was necessary. The draft permit shall be subject to the requirements of WAC 173-406-500 and 173-406-600.

(3) Any reopening of an acid rain permit shall not affect the term of the permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-706, filed 11/23/94, effective 12/24/94.]

PART VIII
COMPLIANCE CERTIFICATION

WAC 173-406-800 Compliance certification.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-800, filed 11/23/94, effective 12/24/94.]

WAC 173-406-801 Annual compliance certification report. (1) Applicability and deadline. For each calendar year in which a unit is subject to the acid rain emissions limitations, the designated representative of the source at which the unit is located shall submit to the administrator and to the permitting authority, within sixty days after the end of the calendar year, an annual compliance certification report for the unit in compliance with 40 CFR 72.90.

(2) The submission of complete compliance certifications in accordance with subsection (1) of this section and 40 CFR part 75 shall be deemed to satisfy the requirement to submit compliance certifications under WAC 173-401-600 with regard to the acid rain portion of the source's operating permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-801, filed 11/23/94, effective 12/24/94.]

WAC 173-406-802 Units with repowering extension plans. (1) Design and engineering and contract requirements. No later than January 1, 2000, the designated representative of a unit governed by an approved repowering plan shall submit to the administrator and the permitting authority:

(a) Satisfactory documentation of a preliminary design and engineering effort.

(b) A binding letter agreement for the executed and binding contract (or for each in a series of executed and binding contracts) for the majority of the equipment to repower the unit using the technology conditionally approved by the administrator under 40 CFR 72.44 (d)(3).

(c) The letter agreement under (b) of this subsection shall be signed and dated by each party and specify:

(i) The parties to the contract;

(ii) The date each party executed the contract;

(iii) The unit to which the contract applies;

(iv) A brief list identifying each provision of the contract;

(v) Any dates to which the parties agree, including construction completion date;

(vi) The total dollar amount of the contract; and

(vii) A statement that a copy of the contract is on site at the source and will be submitted upon written request of the administrator or the permitting authority.

(2) Removal from operation to repower. The designated representative of a unit governed by an approved repowering plan shall notify the administrator and the permitting authority in writing at least sixty days in advance of the date on which the existing unit is to be removed from operation so that the qualified repowering technology can be installed, or is to be replaced by another unit with the qualified repowering technology, in accordance with the plan.

(3) Commencement of operation. Not later than sixty days after the units repowered under an approved repowering plan commences operation at full load, the designated representative of the unit shall submit a report to the administrator and the permitting authority, comparing the actual hourly emissions and percent removal of each pollutant controlled at the unit to the actual hourly emissions and percent removal at the existing unit under the plan prior to repowering, determined in accordance with 40 CFR part 75.

(4) Decision to terminate. If at any time before the end of the repowering extension and before completion of construction and start-up testing, the owners and operators decide to terminate good faith efforts to design, construct, and test the qualified repowering technology on the unit to be repowered under an approved repowering plan, then the designated representative shall submit a notice to the administrator and the permitting authority by the earlier of the end of the repowering extension or a date within thirty days of such decision, stating the date on which the decision was made.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-802, filed 11/23/94, effective 12/24/94.]

PART IX
NITROGEN OXIDES

WAC 173-406-900 Nitrogen oxides emission reduction program. (Reserved.)

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-900, filed 11/23/94, effective 12/24/94.]

PART X
SULFUR DIOXIDE OPT-IN

WAC 173-406-950 Sulfur dioxide opt-ins. (Reserved.)

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-950, filed 11/23/94, effective 12/24/94.]

Chapter 173-410 WAC
SULFITE PULPING MILLS

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-410-011	Statement of policy and purpose. [Order DE 76-36, § 173-410-011, filed 12/28/76. Formerly WAC 18-38-011.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-410-031	Specific emission standards. [Order DE 76-36, § 173-410-031, filed 12/28/76. Formerly WAC 18-38-031.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-410-036	General emission standards and nuisance control measures. [Order DE 76-36, § 173-410-036, filed 12/28/76. Formerly WAC 18-38-036.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-410-041	More restrictive emission standards. [Order DE 76-36, § 173-410-041, filed 12/28/76. Formerly WAC 18-38-041.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-410-042	Emission requirements of prior jurisdictions. [Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-410-042, filed 3/6/85.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-410-051	Compliance. [Order DE 76-36, § 173-410-051, filed 12/28/76. Formerly WAC 18-38-051.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-410-061	Monitoring and reporting. [Order DE 76-36, § 173-410-061, filed 12/28/76. Formerly WAC 18-38-061.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-410-066	Report of startup, shutdown, breakdown or upset condition. [Order DE 76-36, § 173-410-066, filed 12/28/76. Formerly WAC 18-38-066.] Repealed by 80-04-050 (Order DE 80-8), filed 3/21/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331.
173-410-081	Notice of construction. [Order DE 76-36, § 173-410-081, filed 12/28/76. Formerly WAC 18-38-091.] Repealed by 80-04-050 (Order DE 80-8), filed 3/21/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331.
173-410-090	Operating permit. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-090, filed 8/20/80.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.
173-410-091	Exemptions. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-091, filed 8/20/80; Order DE 76-36, § 173-410-091, filed 12/28/76. Formerly WAC 18-38-081.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

WAC 173-410-012 Statement of purpose. These rules are enacted under the provisions of the Washington Clean Air Act as amended (RCW 70.94.395) to:

(1) Assume state jurisdiction over emissions from sulfite pulping mills to provide for the systematic control of air pollution in this industry and for the proper development of the state's natural resources; and

(2) Establish technically feasible and reasonably attainable standards and revise such standards as new information and better technology are developed and become available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-012, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-012, filed 8/20/80.]

WAC 173-410-021 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter, shall have the following meanings:

(1) "Acid plant" means the facility in which the cooking liquor is either manufactured or fortified when not associated with a recovery system.

(2) "Average daily emission" means total weight of an air contaminant emitted in each month, divided by the number of days of production that month.

(3) "Average daily production" means air dried tons of unbleached pulp produced in a month, divided by the number of days of production in that month.

(4) "Blow system" includes the storage chest, tank or pit to which the digester pulp is discharged following the cook.

(5) "Recovery system" means the process by which all or part of the cooking chemicals may be recovered, and cooking liquor regenerated from spent cooking liquor, including evaporation, combustion, dissolving, fortification, storage facilities, and emission control equipment associated with the recovery cycle.

(6) "Sulfite pulping mill" means any manufacturing facility which uses a cooking liquor consisting of sulfurous acid, a sulfite or bisulfite salt alone or in any combination, with or without additional mechanical refining or delignification to produce pulp, pulp products or cellulose from wood fibers. For the purposes of this regulation "sulfite pulping mill" is equivalent to "source."

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-021, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-410-021, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-410-021, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-021, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-050 (Order DE 80-8), § 173-410-021, filed 3/21/80; Order DE 76-36, § 173-410-021, filed 12/28/76. Formerly WAC 18-38-021.]

WAC 173-410-035 Emission standards for sources emitting hazardous air pollutants. The provisions of WAC 173-400-075 "Emission standards for sources emitting hazardous air pollutants" shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-035, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-18-010 (Order DE 83-22), § 173-410-035, filed 8/26/83.]

WAC 173-410-040 Emission standards. In addition to the general applicability of chapters 173-400 and 173-490 WAC to all emission sources; no sulfite pulping mill shall cause or permit air contaminant emissions in excess of the limits listed below. Specific emission standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.

(1) Sulfur dioxide.

(a) The total average daily emissions from a sulfite pulping mill, or a portion of a sulfite pulping mill which practices incineration of the spent sulfite liquor, shall not exceed ten grams of sulfur dioxide per kilogram (twenty pounds per ton) of air dried, unbleached pulp produced.

(b) The total average daily emissions from a sulfite pulping mill, or a portion of a sulfite pulping mill that does not incinerate the spent sulfite liquor, shall not exceed two grams of sulfur dioxide per kilogram (four pounds per ton) of air dried, unbleached pulp produced.

(c) The blow system emissions shall not exceed 0.1 grams of sulfur dioxide per minute, on a fifteen minute average, per kilogram (0.2 pounds per ton) of air dried, unbleached pulp discharged from the digester.

(d) Emissions from the recovery system and acid plant shall not exceed 800 ppm of sulfur dioxide for any hourly average.

(e) Emissions from recovery systems constructed after January 24, 1972, shall not exceed 300 ppm of sulfur dioxide for any hourly average.

(f) Emissions from any emissions unit, other than a recovery system, a blow system or an acid plant, shall not exceed 1000 ppm of sulfur dioxide, corrected to seven percent oxygen in the case of combustion unit, for any hourly average.

(2) Particulate.

(a) Emissions of particulate from recovery systems constructed before January 24, 1972, shall not exceed 0.23 grams per dry cubic meter of exhaust at standard conditions (0.10 grains/dscf) corrected to eight percent oxygen.

(b) Emissions of particulate matter from recovery systems constructed after January 24, 1972, shall not exceed 0.14 grams per dry cubic meter of exhaust at standard conditions (0.06 grains/dscf) corrected to eight percent oxygen.

(c) The emission of particulates from emissions units other than acid plants or recovery systems shall not exceed the following maximums:

(i) 0.46 grams per dry cubic meter at standard conditions (0.2 grains/dscf) corrected to seven percent oxygen, for units which combust wood and wood residue to produce steam and which commenced construction prior to January 1, 1983.

(ii) 0.12 grams per dry cubic meter at standard conditions (0.05 grains/dscf) corrected to seven percent oxygen, for units which combust fuel other than wood and wood residue to produce steam, and which commenced construction after January 1, 1983.

(iii) 0.23 grams per dry cubic meter at standard conditions (0.1 grains/dscf) corrected to seven percent oxygen in the case of combustion units, for units not classified under (c) (i) or (ii) of this subsection.

(3) Opacity. No person shall cause or allow the emission of a plume from a recovery system or acid plant which has an average opacity greater than thirty-five percent, for more than six consecutive minutes in any sixty minute period, except as allowed per RCW 70.94.331 (2)(c).

(4) Operation and maintenance. At all times, including periods of abnormal operations and upset conditions, owners and operators shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(5) No recovery system shall emit total reduced sulfur (TRS) gases in excess of 17.5 ppm for a daily average.

(6) More restrictive limits. Ecology may set more restrictive emissions limits than the specific limits set in this chapter (after public involvement and hearing), if there is reason to believe that the emission(s) from a source is a cause of public nuisance or a cause of violation of ambient air quality standards. The source shall, within ninety days from notification of the more restrictive limits, achieve operation that will prevent further recurrence of the nuisance or violation.

(7) Source testing. To demonstrate compliance with this chapter, the provisions of WAC 173-400-105 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-410-040, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-040, filed 8/20/80.]

WAC 173-410-045 Creditable stack height and dispersion techniques. The provisions of WAC 173-400-200 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-045, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-410-045, filed 12/16/87.]

WAC 173-410-062 Monitoring requirements. Each mill shall conduct routine monitoring of emissions in accordance with a program that has been approved by ecology. Results of monitoring shall be reported within fifteen days of the end of each calendar month and shall include data as follows:

(1) For the recovery system and acid plant:

(a) The average daily emissions of sulfur dioxide expressed as grams SO_2 per kilogram of air dried, unbleached pulp produced and the kilograms of SO_2 per day.

(b) Daily average concentration of sulfur dioxide.

(c) The date, time and concentration for each sulfur dioxide emission violation and the total number of hours that exceed the standard.

(d) The results of particulate tests conducted during the month.

(2) For the blow system:

(a) The grams of sulfur dioxide per minute, on a fifteen minute average, per kilogram of air dried, unbleached pulp discharged from the digester.

(b) The average daily production of air dried, unbleached pulp.

(3) Each mill shall furnish, upon request of ecology, such other pertinent data required to evaluate the mill's emission control program.

(4) All measurements shall be made in accordance with WAC 173-400-105.

(5) Each mill shall be required to establish a program approved by ecology for continuous opacity monitoring to demonstrate compliance with WAC 173-410-040(3) and to report the results to ecology in a format and on a schedule set by regulatory order. If equipment for continuous monitoring

of opacity is not available, continuous monitoring of operating parameters may be required as an alternate until continuous opacity monitoring equipment is available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-062, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-062, filed 8/20/80.]

WAC 173-410-067 Report of startup, shutdown, breakdown or upset conditions. The provisions of WAC 173-400-105(5) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-067, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-410-067, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-067, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-050 (Order DE 80-8), § 173-410-067, filed 3/21/80.]

WAC 173-410-071 Emission inventory. The provisions of WAC 173-400-105(1) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-071, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 89-02-055 (Order 88-39), § 173-410-071, filed 1/3/89; 83-09-036 (Order DE 83-13), § 173-410-071, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-071, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-050 (Order DE 80-8), § 173-410-071, filed 3/21/80.]

WAC 173-410-086 New source review (NSR). The provisions of WAC 173-400-110 shall apply to all new sources and emissions units to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-086, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-410-086, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-086, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-050 (Order DE 80-8), § 173-410-086, filed 3/21/80.]

WAC 173-410-087 Prevention of significant deterioration (PSD). The provisions of WAC 173-400-141 shall apply to all new major sources and major modifications to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-087, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-410-087, filed 12/16/87.]

WAC 173-410-100 Special studies. Ecology may require such additional special studies relevant to process emissions and establish completion dates as it finds necessary.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-100, filed 2/19/91, effective 3/22/91.]

Chapter 173-415 WAC
PRIMARY ALUMINUM PLANTS

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-415-041	Emission requirements of prior jurisdictions. [Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-415-041, filed 3/6/85.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-415-090	Operating permit. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-090, filed 8/14/80.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

WAC 173-415-010 Statement of purpose. These rules are enacted under the provisions of the Washington Clean Air Act as amended (RCW 70.94.395) to:

(1) Assume state jurisdiction over emissions from primary aluminum reduction plants to provide for the systematic control of air pollution in this industry and for the proper development of the state's natural resources; and

(2) Establish technically feasible and reasonably attainable standards and revise such standards as new information and better technology are developed and become available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-010, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-010, filed 8/14/80. Formerly WAC 18-52-010.]

WAC 173-415-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter, shall have the following meanings:

(1) "Fluorides" means compounds of the element fluorine.

(2) "Forage" means grasses, pasture and other vegetation that is normally consumed or is intended to be consumed by livestock.

(3) "Primary aluminum plant" or "primary aluminum reduction plant" or "primary aluminum mill" means a plant which produces aluminum metal from aluminum oxide (alumina). For the purposes of this regulation "primary aluminum plant" is equivalent to "source."

(4) "Potline primary emission control system" means the equipment and procedures designed to collect and remove contaminants from the exhaust gases which are captured at the pot.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-020, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-415-020, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13),

§ 173-415-020, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-020, filed 8/14/80. Formerly WAC 18-52-021.]

WAC 173-415-030 Emission standards. In addition to the general applicability of chapters 173-400 and 173-490 WAC to all emission sources; all primary aluminum plants are required to meet the emission standards of this chapter. Specific emissions standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.

(1) Fluoride.

(a) The emission of gaseous and particulate fluorides for all emissions units within a primary aluminum plant shall be restricted so that the plant's emissions will not cause ambient air and forage standards for fluorides established by chapter 173-481 WAC to be exceeded outside the property controlled by the aluminum plant owner(s) or operator(s).

(b) Each potline primary emission control system shall be designed so that the control of fluoride emissions will be equivalent to a total fluoride collection efficiency of: (i) Eighty percent for vertical stud soderberg and side worked prebake pots, (ii) eighty-five percent for horizontal stud soderberg pots, and (iii) ninety-five percent for center worked prebake pots. A primary emission control system with a design removal efficiency of at least ninety-five percent of the fluoride collected is required.

(2) Particulate. The total emission of particulate matter to the atmosphere from the reduction process (potlines) shall be reduced to the lowest level consistent with reasonably available control technology (RACT) for primary aluminum plants. The emission of solid particulate shall not exceed 7.5 grams per kilogram (fifteen pounds per ton) of aluminum produced on a daily basis.

(3) Visible emissions. Visible emissions from any emissions unit in a primary aluminum plant shall not exceed an average twenty percent opacity for more than six consecutive minutes in any sixty minute period. This provision shall not apply:

(a) When the presence of uncombined water is the only reason for the opacity of the plume to exceed twenty percent; or

(b) When an alternate opacity limit has been established under RCW 70.94.331 (2)(c).

(4) Fugitive emissions. Each primary aluminum plant shall use RACT to prevent fugitive emissions.

(5) Sulfur dioxide.

(a) Total emissions of sulfur dioxide from all emissions units shall not exceed thirty grams of sulfur dioxide per kilogram of aluminum produced on a monthly average (sixty pounds per ton). Those primary aluminum plants which were in excess of the above sulfur dioxide limit on January 1, 1978, will be allowed to emit at the January 1, 1978, level of emissions provided that the owners or operators did demonstrate to ecology by July 1, 1981, by use of modeling and ambient measurements, that the emissions will not cause the ambient standard to be exceeded, and that the limits are placed in a regulatory order(s).

(b) In no case shall any plant cause or permit the emission of a gas containing sulfur dioxide in excess of one thousand parts per million corrected to dry standard conditions for an hourly average.

(6) Operation and maintenance. At all times, including periods of abnormal operation and upset, owners and operators shall, to the extent practicable, maintain an affected facility, and operate and maintain air pollution control equipment associated with such facility in a manner consistent with good air pollution control practice. A plant may elect to establish a program, subject to the approval of ecology, for monitoring each potroom in order to demonstrate good operation and maintenance.

(7) Source testing. To demonstrate compliance with this chapter, the provisions of WAC 173-400-105 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-030, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-415-030, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-030, filed 8/14/80. Formerly WAC 18-52-031.]

WAC 173-415-040 Standards of performance. The provisions of WAC 173-400-115 "Standards of performance for new sources" shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-020 (Order DE 82-21), § 173-415-040, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-040, filed 8/14/80. Formerly WAC 18-52-051.]

WAC 173-415-045 Creditable stack height and dispersion techniques. The provisions of WAC 173-400-200 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-045, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-415-045, filed 12/16/87.]

WAC 173-415-050 New source review (NSR). The provisions of WAC 173-400-110 shall apply to all new sources and emissions units to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-050, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-415-050, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-050, filed 8/14/80. Formerly WAC 18-52-056.]

WAC 173-415-051 Prevention of significant deterioration (PSD). The provisions of WAC 173-400-141 shall apply to all new major sources and major modifications to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-051, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-415-051, filed 12/16/87.]

WAC 173-415-060 Monitoring and reporting. (1) Each primary aluminum plant shall conduct routine monitor-

ing of emissions, ambient air, and forage in accordance with a program that has been approved by ecology. Results of monitoring shall be reported within thirty days of the end of each calendar month and shall include data as follows:

(a) Ambient air: Twenty-four hour concentrations of gaseous fluoride in the ambient air expressed in micrograms of hydrogen fluoride per cubic meter of ambient air.

(b) Forage: Concentrations of fluoride in forage expressed in parts per million of fluoride on a dried weight basis.

(c) Particulate emissions: Results of all emission sampling conducted during the month for particulates, expressed in grains per standard dry cubic foot, in pounds per day, and in pounds per ton of aluminum produced. The method of calculating pounds per ton shall be as specified in the approved monitoring programs. Particulate data shall be reported as total particulates and percentage of fluoride ion contained therein.

Compliance with WAC 173-415-030(2) shall be determined by measurements of emissions from the potline primary control system plus measurements of emissions from the roof monitor.

(d) Fluoride emissions: Results of all sampling conducted during the month for fluoride emissions. All results shall be expressed as hydrogen fluoride in parts per million on a volume basis and pounds per day of hydrogen fluoride.

(e) Other emission and ambient air data as specified in the approved monitoring program.

(2) Other data: For ecology to evaluate a plant's emissions or emission control program, each primary aluminum plant shall furnish other data requested by ecology.

(3) Change in raw materials or fuel: Any change or series of changes in raw material or fuel which results in a cumulative increase in emissions of sulfur dioxide of five hundred tons per year or more over that stated in the 1979 inventory required by WAC 173-415-080 shall require the submittal of sufficient information to ecology so that the effect upon ambient concentrations of sulfur dioxide can be determined. Ecology may issue regulatory orders requiring controls to reduce the effect of such increases.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-060, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-060, filed 8/14/80. Formerly WAC 18-52-061 and 18-52-071.]

WAC 173-415-070 Report of startup, shutdown, breakdown or upset conditions. The provisions of WAC 173-400-105(5) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-070, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-415-070, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-070, filed 8/14/80. Formerly WAC 18-52-077.]

WAC 173-415-080 Emission inventory. The provisions of WAC 173-400-105(1) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-080, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 89-02-055 (Order 88-39), § 173-415-080, filed 1/3/89; 83-09-036 (Order DE 83-13), § 173-415-080, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-080, filed 8/14/80. Formerly WAC 18-52-086.]

Chapter 173-420 WAC

CONFORMITY OF TRANSPORTATION ACTIVITIES TO AIR QUALITY IMPLEMENTATION PLANS

WAC

WAC 173-420-010 Title. This chapter shall be known as the "Washington State Clean Air Conformity Act" hereinafter as "this chapter."

[Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-010, filed 1/22/93, effective 2/22/93.]

WAC 173-420-020 Purpose and intent. This chapter implements RCW 70.94.037 of the Washington Clean Air Act (chapter 70.94 RCW). The law requires the departments of ecology and transportation to develop criteria and guidance for demonstrating and assuring conformity of transportation plans, programs, and projects to the purpose of the state implementation plan for attaining and maintaining the national ambient air quality standards and meeting the requirements of the federal Clean Air Act (42 U.S.C. 7401) as amended. This chapter is jointly adopted by the departments of ecology and transportation and can be amended only by agreement between the departments. This chapter sets forth minimum requirements for evaluating transportation plans, programs, and projects for conformity with the purpose and intent of state implementation plans for air quality. This chapter clarifies state policy and procedures to achieve national ambient air quality standards, foster long-range planning for attainment and maintenance of those standards, provide at least as stringent requirements as the federal conformity regulation (40 C.F.R. Part 51 Subpart T), provide a basis for evaluating conformity determinations, and guide state, regional, and local agencies in making conformity determinations.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-020, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-020, filed 1/22/93, effective 2/22/93.]

WAC 173-420-030 Scope. (1) Conformity determinations shall be made for the adoption, acceptance, approval, funding, or support of all transportation plans, improvement programs, and projects located in or affecting nonattainment and maintenance areas for any criteria pollutants.

(2) Regional transportation plans that contain either wholly or partially a nonattainment area for any criteria pollutant shall comply with this chapter. Transportation plans that do not contain either wholly or partially a nonattainment or maintenance area are exempt from this chapter.

(3) Transportation improvement programs shall comply with this chapter. The regional transportation improvement program shall include projects on the regional transportation system; transportation control measures of local government six-year street and road programs developed pursuant to RCW 36.81.121 and 35.77.010; and transit management plans developed pursuant to RCW 35.58.2795. Transportation improvement programs for areas that do not contain either wholly or partially a nonattainment or maintenance area for any criteria pollutants are exempt from this chapter.

(4) Projects contained in the regional transportation improvement program of a metropolitan area boundary and within a county that either wholly or partially contains a nonattainment area shall comply with this chapter. Projects not on the regional transportation system shall be considered to comply with the general provisions of this chapter; however they must be evaluated by the lead agency during compliance with the requirements of the State Environmental Policy Act (SEPA), (chapter 197-11 WAC), to determine if a conformity analysis and determination based upon this chapter is warranted. Preservation or maintenance projects in WAC 173-420-110 are exempt from the conformity requirements of this chapter.

(5) Projects on the regional transportation system that are located outside a nonattainment area but affect traffic or air quality of a nonattainment area shall comply with WAC 173-420-060, 173-420-065 and 173-420-100.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-030, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-030, filed 1/22/93, effective 2/22/93.]

WAC 173-420-040 Definitions. The following definitions will apply unless a different meaning is clearly required by context:

"Criteria pollutants" means air pollutants for which a NAAQS has been promulgated under the federal Clean Air Act (40 C.F.R. 50) and their precursors and, for this chapter, applies only to those pollutants for which nonattainment or maintenance areas have been designated.

"Action scenario" means the future transportation system determined pursuant to the federal transportation conformity regulation (40 C.F.R. Part 51 Subpart T) in a year that is being analyzed for conformity that will result from the implementation of the proposed plan and/or transportation improvement program.

"Baseline scenario" means the transportation system determined pursuant to the federal transportation conformity regulation (40 C.F.R. Part 51 Subpart T) in a year that is being analyzed for conformity that would result from the plan, improvement program, and facilities, services, and activities that are in effect in the year the conformity analysis is being conducted.

"Lead agency" means the agency with primary responsibility for ensuring plan, program, or project compliance with SEPA, (chapter 197-11 WAC).

"Maintenance area" means any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainments subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended.

"Metropolitan area boundary" (MAB) means an area determined by an agreement between the governor and the MPO as defined in 23 U.S.C. 134.

"Metropolitan planning organization" (MPO) means an organization for each urbanized area of more than fifty thousand people as defined in 23 U.S.C. 134, whose responsibilities include development of transportation plans and improvement programs for those areas.

"Motor vehicle emission budget" means that portion of the total allowable emission defined in a state implementation plan for a certain date for the purpose of meeting attainment or maintenance demonstrations for any criteria pollutant or its precursors, that is allocated by the SIP to highway and transit vehicles.

"National ambient air quality standards" (NAAQS) means air quality standards promulgated for criteria pollutants under the federal Clean Air Act (40 C.F.R. 50). The standard for carbon monoxide is thirty-five parts per million over a one-hour period or nine parts per million over an eight-hour period. The standard for ozone is 0.12 parts per million over a one-hour period. The standard for PM10 is fifty $\mu g/m^3$ annual arithmetic mean or 150 $\mu g/m^3$ maximum twenty-four hour average concentration.

"Nonattainment area" means the geographic area designated as not meeting the NAAQS for a criteria pollutant. The boundaries are proposed by the governor, approved by the federal environmental protection agency (EPA), and include that area required to implement plans and programs for attainment of the NAAQS published in the federal register.

"Regional transportation system" means the transportation system identified by an MPO in development of planning requirements under the federal Intermodal Surface Transportation Efficiency Act (ISTEA) (P.L. 102-240).

"Regionally significant project" means a transportation project that is on a facility which serves regional transportation needs and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative for regional highway travel.

"State implementation plan" (SIP) means a plan as defined in section 302(q) of the CAA and which implements the relevant requirements of the CAA that is intended to eliminate or reduce the severity and number of violations of the national ambient air quality standards and expeditiously achieve those standards, and includes the revision referred to as the maintenance plan that provides for the maintenance of the NAAQS in the area concerned for at least ten years after the redesignation of a nonattaiment area to an attainment area.

"Transportation control measure" (TCM) means a transportation project, program, or action listed in the state implementation plan that will aid in elimination or reduction of the severity or number of violations of the national ambient air quality standards and help expeditiously attain and maintain those standards.

"Transportation improvement program" (TIP) means a schedule of intended transportation improvements (or continuation of current activities) as required in section 134 of Title 23 U.S.C. A TIP shall include projects within the MPO's area that are proposed for funding under Title 23 U.S.C. and the federal Transit Act, projects that are part of or consistent with the transportation plan as previously defined, and transportation control measures that are included in the state implementation plan for meeting NAAQS.

"Transportation plan" means a document that is required under the regulation implementing section 134 of Title 23 U.S.C., and section 8 of the federal Transit Act, and is intended to foster a continuing, cooperative, and comprehensive planning process.

"Transportation projects" means an action that expends funds on or approves physical and/or operational alterations to a transportation system.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-040, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-040, filed 1/22/93, effective 2/22/93.]

WAC 173-420-050 General provisions. (1) Conformity review will include transportation plans, improvement programs, and projects on the regional transportation system. The review utilizes requirements from the federal Clean Air Act, the Washington Clean Air Act (chapter 70.94 RCW), the Growth Management Act (GMA) (chapter 36.70A RCW), the State Environmental Policy Act (SEPA) (chapter 43.21C RCW), and the federal ISTEA (P.L. 102-240).

(2) Identification of transportation plans and improvement programs that affect nonattainment areas, identification of projects on the regional transportation system, and coordination and consistency among plans shall be accomplished through the planning processes required by the GMA and the ISTEA.

(3) Transportation plans and improvement programs on the regional transportation system within metropolitan area boundaries that contain nonattainment areas shall be coordinated through the MPO using the regional planning process required by ISTEA (P.L. 102-240).

(4) Transportation control measures shall be identified and incorporated into plans and programs through the SIP process required by the federal Clean Air Act.

(5) Early and continuous public participation shall be a component of the conformity process pursuant to requirements of the GMA (chapter 36.70A RCW) and ISTEA (P.L. 102-240). At least one public hearing shall be held on transportation plan and improvement program conformity determinations. Such hearings may be combined with general hearings required for the transportation plans or improvement programs. Public comment on project conformity shall be completed as part of the SEPA process (chapter 197-11 WAC).

(6) Disagreement over a conformity determination for a plan or program shall be presented in writing to the MPO and shall identify the changes considered necessary to achieve conformity. The MPO shall convene a meeting or meetings with the contesting party, parties of record, consulted agencies, and the state departments of ecology and transportation within fifteen working days of receipt of the written document contesting the determination. The meeting shall be to review the written reasons for contesting the determination. A written decision stating the changes, if any, in the conformity determination on the plan or program shall be provided to each of the meeting participants. The department of ecology or air pollution control authority may appeal the written decision, provided a written appeal to the governor is filed within fourteen calendar days of the written decision.

(7) Disagreements on project conformity findings shall be addressed through the SEPA process (chapter 197-11 WAC).

(8) If the classification or designation of a nonattainment or maintenance area changes, the next consultation meeting required under WAC 173-420-070 shall incorporate the criteria in the federal transportation conformity regulation (40 C.F.R. Part 93 Subpart A and 40 C.F.R. Part 51 Subpart T) that apply to the new classification or designation for use in all subsequent conformity determinations.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-050, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-050, filed 1/22/93, effective 2/22/93.]

WAC 173-420-055 SIP impacts on conformity determinations. (1) Until EPA redesignates a nonattainment area to an attainment area the status of the applicable SIP shall have the following impact on the conformity of plans, TIPs and projects:

(2) If the applicable SIP is not submitted by the deadline for submittal:

(a) Four months after the applicable deadline no new plan or TIP shall be found to conform; and

(b) Twelve months after the applicable deadline the conformity status of the existing plan and TIP shall lapse and no new project-level conformity determinations shall be made.

(3) If the SIP submittal for a PM10 NAA or for a CO NAA with a design value of 12.7 ppm or greater is found to be incomplete by EPA:

(a) If the incompleteness finding is because measures committed to in the SIP are not in an enforceable form as required by section 110 (a)(2)(A) of the CAA then twelve months after the finding the conformity status of the existing plan and TIP shall lapse;

(b) Four months after the finding no new plan or TIP shall be found to conform; and

(c) Twelve months after the finding the conformity status of the existing plan and TIP shall lapse and no new project-level conformity determinations shall be made.

(4) For a complete SIP for a PM10 NAA or for a CO NAA with a design value of 12.7 ppm or greater or for a maintenance plan disapproved by EPA:

(a) No new plan, TIP or project shall be found to conform;

(b) If the disapproval is because the measures committed to in the SIP are not in an enforceable form as required by section 110 (a)(2)(A) of the CAA then twelve months after the disapproval the conformity status of the existing plan and TIP shall lapse; and

(c) Four months after the disapproval the conformity status of the existing plan and TIP shall lapse and no new project-level conformity determinations shall be made.

(5) If a SIP submitted for a marginal ozone NAA or a CO NAA with a design value less than 12.7 ppm contains control strategies then the requirements of subsections (3) and (4) of this section shall apply.

(6) The provisions of subsections (2), (3), (4), and (5) of this section shall be removed upon receipt of a letter from the EPA regional administrator acknowledging remedying of the deficiencies.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-055, filed 8/25/95, effective 9/25/95.]

WAC 173-420-060 General criteria. (1) Transportation plans, improvement programs, and projects shall meet the purpose and intent of the current SIP of eliminating or reducing the severity and number of violations of the NAAQS and expeditiously achieving those standards, comply with the federal transportation conformity regulations, (40 C.F.R. Part 51 Subpart T), and shall not preclude the implementation of any transportation control measures identified in the SIP.

(2) All transportation plans, improvement programs, and projects shall comply with the criteria in subsection (3) of this section, in addition to the specific criteria contained in WAC 173-420-080, 173-420-090, and 173-420-100, respectively.

(3) Transportation plans, improvement programs, or projects shall not:

(a) Cause or contribute to any new violation of the NAAQS;

(b) Increase the frequency or severity of any existing violation of the NAAQS; or

(c) Delay the timely attainment of the NAAQS.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-060, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-060, filed 1/22/93, effective 2/22/93.]

WAC 173-420-065 Specific criteria. (1) All transportation plans, improvement programs, and projects shall comply with the criteria in subsections (2), (3), and (4) of this section.

(2) At all times the following criteria shall be met:

(a) The conformity determination for plans, TIPs, and projects shall:

(i) Be based on the latest planning assumptions.

(ii) Be based on the latest EPA approved emission estimation model available.

(iii) Be made according to the consultation procedures contained in WAC 173-420-070.

(b) The plan and TIP shall provide for the timely implementation of TCMs from the SIP or maintenance plan.

(c) There shall be a currently conforming plan and currently conforming TIP at the time of project approval.

(d) The project shall come from a conforming plan and conforming TIP.

(e) In CO and PM10 nonattainment and maintenance areas the project shall not cause or contribute to any new localized CO or PM10 violations or increase the frequency or severity of any existing CO or PM10 violations.

(f) In PM10 nonattainment and maintenance areas the project shall comply with PM10 measures in the applicable SIP or maintenance plan.

(3) Until approval of an applicable SIP by EPA the following criteria shall also be met:

(a) Plans and TIPs:

(i) In O3 nonattainment areas the action scenario emissions shall be less than the baseline scenario emissions.

(ii) In O3 nonattainment areas the action scenario emissions shall be less than the 1990 emissions.

(iii) In all CO nonattainment areas the action scenario emissions shall be less than the baseline scenario emissions.

(iv) In all CO nonattainment areas the action scenario emissions shall be less than the 1990 emissions.

(v) In CO nonattainment areas with a design value of 12.7 ppm or greater, the emissions shall be less than or equal to the motor vehicle emissions budget.

(vi) In PM10 nonattainment areas the emissions shall be less than or equal to the motor vehicle emissions budget.

(vii) In PM10 nonattainment areas the action scenario emissions shall be less than or equal to the baseline scenario emissions or the 1990 emissions.

(b) Projects in CO nonattainment areas shall eliminate or reduce the severity and number of localized CO violations in the area substantially affected by the project.

(4) After approval of the SIP by EPA or when the maintenance plan is in effect the following criteria shall be met:

(a) The plan and TIP shall be consistent with the Motor Vehicle Emissions Budget (MVEB) in the applicable SIP or maintenance plan.

(b) No additional criteria are required for projects.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-065, filed 8/25/95, effective 9/25/95.]

WAC 173-420-070 Air quality analysis procedures. (1) Air quality analysis for transportation plans, programs, and projects shall be modeled for criteria pollutants using EPA and the federal Department of Transportation approved methods.

(2) Air quality analysis procedures and methodology used in determining conformity for transportation plans and improvement programs shall be determined through consultation with the MPO, the United States Department of Transportation and the Environmental Protection Agency, the state departments of ecology and transportation, the local air authority, and other interested representatives of the public. The consultation procedure for SIP and maintenance plan development in the applicable SIP shall be used for the consultation process required by this section. The consultation process shall also be used for determining research and data collection efforts, and regional transportation model development, events that will trigger new conformity determinations, the status of TCMs, significant changes in project design and scope, and projects which require PM10 analysis. The spe-

cific analysis procedures and methodology selected shall comply with this chapter, the federal transportation conformity regulation (40 C.F.R. Part 51 Subpart T), and the applicable SIP. Agreement on the methods and assumptions including modeling parameters, model accuracy, and the base year against which alternatives are compared, shall be reached on all programs and plans prior to the conformity determination. Procedures, methodologies, and input parameters shall be reviewed and updated at least once every two years under the direction of the departments of ecology and transportation. Such review shall occur prior to conformity determination of transportation plan or TIP revisions.

(3) Procedures, methodologies, and assumptions for project analysis shall be consistent with those procedures, methodologies, and assumptions developed for analysis of transportation plans and improvement programs in subsection (2) of this section.

(4) Each MPO shall conduct conformity analyses of the transportation plan and improvement program developed in its region.

(5) The lead agency shall be responsible for project conformity analysis.

(6) The impact of preferred alternative transportation plans, improvement programs, and projects shall be quantified and compared for compliance to the SIP requirements, and the requirements of WAC 173-420-060, and 173-420-065. If modeling does not indicate that the requirements of this section are met, mitigating measures shall be required and the plan, improvement program, or project remodeled. All else being equal, the alternative with the lowest concentration shall be chosen over all other alternatives.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-070, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-070, filed 1/22/93, effective 2/22/93.]

WAC 173-420-080 Transportation plan conformity. Transportation plans shall include policies and provisions that promote the reduction of criteria pollutants. Transportation plans shall identify those aspects of the existing transportation system whose modification offers the best opportunity for improving air quality. Transportation plans shall include descriptions of the existing and proposed transportation system in sufficient detail, to permit conformity determinations using the criteria in WAC 173-420-060 and 173-420-065. Plans shall be analyzed with regional emission analysis for criteria pollutants. Local plans that are consistent under RCW 47.80.030 with a conforming regional transportation plan are deemed to comply with this chapter provided that the requirements of WAC 173-420-050 are met. Upon a conformity finding by the MPO, the plan shall be submitted to the United States Department of Transportation for federal conformity determination.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-080, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-080, filed 1/22/93, effective 2/22/93.]

WAC 173-420-090 Transportation improvement program conformity. (1) This section applies to all transportation improvement programs that authorize purchase of right of way or that fund construction of projects on the regional transportation system within a metropolitan area boundary of any region that is contained either wholly or partially in a nonattainment area for each criteria pollutant. The metropolitan planning organization that has responsibility for such a program shall complete all program modeling as required herein and shall conduct an analysis to determine conformity with the current SIP. After a conformity finding by the MPO, the TIP shall be submitted to the United States Department of Transportation for federal conformity determination.

(2) The current SIP is the plan that has been adopted by the department of ecology and submitted to the United States Environmental Protection Agency. Upon adoption of a new state implementation plan, a MPO may use the previous SIP for up to ninety days when making conformity determinations on new TIPs. Ninety days after adoption of a new SIP, MPOs shall use the current SIP when making conformity determinations for new TIPs.

(3) Transportation improvement programs shall comply with WAC 173-420-060. After the attainment year, projects contained in a transportation program shall not cause any violations of the NAAQS. Transportation improvement programs shall be consistent with a conforming transportation plan as described in WAC 173-420-080. Local improvement programs that are consistent with a conforming regional TIP are deemed to comply with this chapter provided that the requirements of WAC 173-420-050 are met.

(4) Metropolitan planning organizations shall update TIP conformity findings whenever the TIP is updated. Projects that are no longer current to the program, or that are no longer intended to begin construction within the period of the program, shall be removed from the conformity analysis.

(5) Transportation improvement programs that have been approved and found to conform to the state implementation plan before adoption of this chapter need not be updated until two years after the enactment of this chapter.

(6) The lead agency of each transportation project on the regional transportation system within the MPO's jurisdiction shall submit sufficient documentation to support the MPO's modeling efforts. This documentation shall include design speed, anticipated speed limit, number of lanes, and lane capacity as relevant for all transportation projects that must comply with WAC 173-420-100 and that are not exempted under WAC 173-420-110.

(7) The TIP shall include the status of each transportation control measure in the state implementation plan as an attached appendix. All transportation control measures shall be scheduled for implementation and funded for completion before the proposed attainment demonstration date for each criteria pollutant. Projects in the transportation improvement program shall not interfere with or cause a delay in the implementation of a transportation control measure. Those transportation control measures that are no longer viable shall be documented and removed from the status report.

[Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-090, filed 1/22/93, effective 2/22/93.]

WAC 173-420-100 Transportation project conformity. (1) This section applies to all transportation projects on

the regional transportation system regardless of funding base within a metropolitan area boundary of any region that is contained either wholly or partially in a nonattainment area. Projects that are exempted from these requirements because they are deemed to have neutral impact on air quality are listed in WAC 173-420-110.

(2) Transportation projects shall meet the analysis requirements of this section before approval of plans, specifications, and estimates; before acquisition of right of way not exempted under WAC 173-420-110; and before expenditure of funds for construction. In no instance shall funds be obligated nor approvals granted that will commit a lead agency to construction of a project if the requirements of this section have not been met.

(3) Transportation projects on the regional transportation system that are located outside a nonattainment area but affect a nonattainment area shall meet the requirements of this section and SEPA (chapter 197-11 WAC). Such transportation projects need not come from a conforming transportation improvement program.

(4) Any temporary construction-related measures shall not prevent a conformity determination, but shall be subject to permit conditions to minimize pollution during construction.

(5) Transportation projects shall be modeled by the lead agency with the methodology determined in WAC 173-420-070. The lead agency shall provide sufficient documentation to demonstrate to the MPO that the requirements of this section are met. Such transportation projects shall be included in a conforming transportation improvement program as described in WAC 173-420-090.

(6) Transportation projects that are not on the regional transportation system and are located in a MAB with a conforming transportation plan and improvement program are deemed to comply with this chapter. Such projects may include, but are not limited to, intersection signalization and channelization, or construction of local or collector streets. In no instances shall the requirements of WAC 173-420-060 be contravened. Transportation projects that are not on a regional transportation system and are not located in a nonattainment area for criteria pollutants are deemed to comply with this chapter.

(7) Transportation projects that are included in a conforming transportation improvement program and that have completed the public comment period of the environmental review requirements of the SEPA or the NEPA before adoption of this chapter, are not required to comply with the conformity requirements of this chapter unless there are significant changes in the project scope.

[Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-100, filed 1/22/93, effective 2/22/93.]

WAC 173-420-110 Exempt projects. The following types of projects because of their nature, will not affect the outcome of any air quality analyses nor add any substance to those analyses and are exempted from all conformity requirements.

(1) Safety, preservation, or maintenance projects of the following type:

(a) Railroad/highway crossing signing;

(b) Pavement marking that does not add lanes or capacity;

(c) Hazard elimination program;

(d) Off-system road safety;

(e) Emergency relief;

(f) Shoulder improvements;

(g) Truck size and weight inspection stations;

(h) Safety improvement program;

(i) Railroad/highway crossing warning devices;

(j) Increasing sight distance that does not require changes in horizontal or vertical alignments;

(k) Guardrails, median barriers, crash cushions;

(l) Pavement resurfacing or rehabilitation;

(m) Widening narrow pavements or bridges (less than one travel lane);

(n) Noise attenuation;

(o) Fencing;

(p) Skid treatments;

(q) Safety roadside rest areas;

(r) Truck climbing lanes outside the urbanized area;

(s) Lighting improvements;

(t) Median additions;

(u) Emergency truck pullovers.

(2) Mass transit projects of the following type:

(a) Purchase of office, shop, and operating equipment for existing facilities;

(b) Purchase of operating equipment for vehicles, including ferries, trains, and buses;

(c) Construction or renovation of power, signal, and communication systems;

(d) Operating assistance;

(e) Rehabilitation of transit vehicles, including buses, ferries, and trains;

(f) Reconstruction or renovation of transit buildings and structures;

(g) Construction of small passenger shelters and information/ticketing kiosks;

(h) Rehabilitation or reconstruction of track structures, track, and trackbed in existing right of way;

(i) Noise attenuation;

(j) Purchase of vehicles to replace existing vehicles or for minor expansions of fleets to provide new service (less than five percent per year);

(k) Construction of new vehicle storage and maintenance facilities;

(l) Purchase of support vehicles.

(3) Air quality projects of the following type:

(a) Continuation of rideshare and vanpooling promotion activities at current levels;

(b) Bicycle projects;

(c) Pedestrian facilities.

(4) Other projects of the following type:

(a) Acquisition of scenic easements;

(b) Planting and landscaping;

(c) Sign removal;

(d) Wetland mitigation, fish passage mitigation, and other environmental mitigation not related to air quality;

(e) Historical and cultural markers;

(f) Preliminary engineering through design, provided that funds are not expended or assurance is not made that will commit to the construction of a project;

(g) Access permits except when there is a break in full, modified, or partial access control;

(h) Advanced land acquisitions that do not influence the environmental assessment of a project, the decision of the need to construct the project, or the selection of project design or location;

(i) Planning and technical studies that do not commit to project implementation;

(j) Training and research programs;

(k) Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-110, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-110, filed 1/22/93, effective 2/22/93.]

WAC 173-420-120 Projects exempt from regional analysis. The following types of projects because of their nature, will not affect the outcome of regional air quality emissions analyses nor add substance to those analyses and are exempted from regional conformity analysis. Project level conformity analysis is required for these types of projects.

(1) Intersection channelization projects;

(2) Intersection signalization projects at individual intersections;

(3) Interchange reconfiguration projects;

(4) Changes in vertical and horizontal alignment;

(5) Truck size and weight inspection stations;

(6) Bus terminals and transfer points.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-120, filed 8/25/95, effective 9/25/95.]

Chapter 173-421 WAC
MOTOR VEHICLE EMISSION CONTROL SYSTEMS

WAC

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 statewide 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

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-422-080	Vehicle inspection data handling procedures. [Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-080, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE-81-32), § 173-422-080, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-080, filed 2/28/80.] Repealed by 93-10-062 (Order 91-46), filed 5/3/93, effective 6/3/93. Statutory Authority: Chapter 70.120 RCW.
173-422-110	Date system requirements. [Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-110, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-110, filed 2/28/80.] Repealed by 93-10-062 (Order 91-46), filed 5/3/93, effective 6/3/93. Statutory Authority: Chapter 70.120 RCW.
173-422-140	Inspection forms and certificates. [Statutory Authority: Chapter 70.120 RCW. 93-10-062 (Order 91-46), § 173-422-140, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-140, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-140, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-140, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-140, filed 2/28/80.] Repealed by 94-05-039 (Order 93-10), filed 2/8/94, effective 3/11/94. Statutory Authority: Chapter 70.120 RCW.
173-422-150	Inspection personnel requirements. [Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-150, filed 2/28/80.] Repealed by 93-10-062 (Order 91-46), filed 5/3/93, effective 6/3/93. Statutory Authority: Chapter 70.120 RCW.
173-422-180	Air quality standards. [Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-180, filed 2/28/80.] Repealed by 93-10-062 (Order 91-46), filed 5/3/93, effective 6/3/93. Statutory Authority: Chapter 70.120 RCW.

WAC 173-422-010 Purpose. This chapter implements the Washington Clean Air Act, chapter 70.94 RCW, as supplemented by the motor vehicle emission inspection provisions codified as chapter 70.120 RCW.

Gasoline motor vehicles are the primary emitters of carbon monoxide and emit significant quantities of hydrocarbons and oxides of nitrogen. Diesel motor vehicles are emitters primarily of particulates, hydrocarbons, and oxides of nitrogen. Emission controls required by the federal government are designed to reduce motor vehicle related air pollution. However, the effectiveness of these controls is substantially reduced through deterioration, maladjustment and tampering. Motor vehicle emission inspection serves to identify high polluting vehicles and vehicles with tampered or missing emission controls and to reduce their emissions, when such reduction can be accomplished at reasonable cost. These rules establish the emission standards, testing procedures, and associated activities necessary to implement a program of air pollution prevention and control resulting from motor vehicle emission inspections.

[Statutory Authority: Chapter 70.120 RCW. 93-10-062 (Order 91-46), § 173-422-010, filed 5/3/93, effective 6/3/93. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-010, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-010, filed 2/28/80.]

WAC 173-422-020 Definitions. Unless a different meaning is clearly indicated by context, the following definitions will apply:

(1) "Appropriate repair" means the diagnosis of the cause(s) of an emission test failure and/or the repair of one or more of these causes. An appropriate repair should reduce at least one emission test reading or diagnose and/or repair an emission problem identified by the on-board diagnostic (OBD) system.

(2) "Certificate of acceptance" means an official form, issued by someone authorized by the department, which certifies that the following conditions have been met:

(a) The vehicle failed an emission inspection; and

(b) The vehicle failed a reinspection; and

(c) All primary emission control components installed by the vehicle manufacturer, or its appropriate replacement, are installed and operative; and

(d) The recipient has provided original receipts listing and providing the cost of each appropriate repair performed by an authorized emission specialist between the initial and last inspection; and

(e) The total cost of the appropriate repairs must equal or exceed:

Pre-1981 vehicles	$100
1981 and newer	$150

(3) "Certificate of compliance" means an official form, issued by someone authorized by the department, which certifies that the recipient's vehicle on inspection complied with applicable emission inspection standards.

(4) "Authorized emission specialist" means an individual who has been issued a certificate of instruction by the department as authorized in RCW 70.120.020 (2)(a) and has maintained the certification by meeting requirements of WAC 173-422-190(2).

(5) "Dealer" means a motor vehicle dealer, as defined in chapter 46.70 RCW as amended, that is licensed pursuant to chapter 46.70 RCW.

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

(7) "Emission contributing area" means a land area within whose boundaries are registered motor vehicles that contribute significantly to the violation of motor vehicle related air quality standards in a noncompliance area.

(8) "Fleet" means a group of fifteen or more motor vehicles owned or leased concurrently by one owner assigned a fleet identifier code by the department of licensing.

(9) "Gross vehicle weight rating (GVWR)" means the manufacturer stated gross vehicle weight rating.

(10) "Motor vehicle" means any self-propelled vehicle required to be licensed pursuant to chapter 46.16 RCW.

(11) "Noncompliance area" means a land area within whose boundaries any air quality standard for any air contaminant from the emissions of motor vehicles will probably be exceeded.

(12) "PPM" means parts per million by volume.

(13) "Primary emission control components" means the components of the vehicle installed by the manufacturer for the purpose of reducing emissions or its replacement or modification which is acceptable to the United States Environmental Protection Agency. These components are, but are not limited to, the catalytic converter or thermal reactor, the air injection system components, the thermostatic air cleaner, the exhaust gas recirculation system components, the evapora-

tive emission system components including the gas cap, the positive crankcase ventilation system components and the electronic control unit components that control the air/fuel mixture and/or ignition timing including all related sensors.

The primary emission control components of a vehicle with a different engine than the engine originally installed shall be an Environmental Protection Agency certified engine/emission control combination for that vehicle or its newer model.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-020, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-020, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-020, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-020, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-020, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-020, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-020, filed 2/28/80.]

WAC 173-422-030 Vehicle emission inspection requirement. All motor vehicles, not specifically exempted by WAC 173-422-170, which are registered or reregistered within the boundaries of an emission contributing area, as specified in WAC 173-422-050, are subject to the vehicle emission inspection requirements of this chapter. In addition, the department may require an emission inspection of a motor vehicle, except military tactical vehicles, operated for more than sixty days a year on a federal installation located within an emission contributing area, or a vehicle garaged at a location within an emission contributing area, or a vehicle which has previously passed an emission inspection but has been identified using on road testing as likely to no longer comply with the inspection standards. Neither the department of licensing, county auditors nor subagents appointed under RCW 46.01.140 may change the registered owner or may issue or renew a motor vehicle license for any vehicle registered in an emission contributing area, as that area is established under RCW 70.120.150, unless the application for issuance or renewal is: (1) Accompanied by a valid certificate of compliance issued pursuant to RCW 70.120.080 or 70.120.170 or a valid certificate of acceptance issued pursuant to RCW 70.120.070; or (2) exempted from this requirement pursuant to RCW 46.16.015(2). Certificates must have a date of validation which is within twelve months of the assigned license renewal date.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-030, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-030, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-030, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-030, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-030, filed 5/3/93, effective 6/3/93. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-030, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-030, filed 2/28/80.]

WAC 173-422-031 Vehicle emission inspection schedules. (1) Vehicles defined in RCW 46.16.015(2) or WAC 173-422-170 are exempt from emission inspections. Vehicles five through twenty-five years old, other than state and local government vehicles, shall be inspected every other year as described in the table below. This inspection schedule does not apply to vehicles that have already been issued a certificate of compliance or a certificate of acceptance within twelve months of the assigned license renewal date.

Year	Model Year of Vehicles Needing Inspection
2002	1978, 1980, 1982, 1984, 1986, 1988, 1990, 1992, 1994, 1997
2003	1979, 1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1996, 1998
2004	1980, 1982, 1984, 1986, 1988, 1990, 1992, 1994, 1997, 1999
2005	1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1996, 1998, 2000
2006	1982, 1984, 1986, 1988, 1990, 1992, 1994, 1997, 1999, 2001
2007	1983, 1985, 1987, 1989, 1991, 1993, 1995, 1996, 1998, 2000, 2002
2008	1984, 1986, 1988, 1990, 1992, 1994, 1997, 1999, 2001, 2003
2009	1985, 1987, 1989, 1991, 1993, 1995, 1996, 1998, 2000, 2002, 2004
2010	1986, 1988, 1990, 1992, 1994, 1997, 1999, 2001, 2003, 2005
2011	1987, 1989, 1991, 1993, 1995, 1996, 1998, 2000, 2002, 2004, 2006
2012	1988, 1990, 1992, 1994, 1997, 1999, 2001, 2003, 2005, 2007

(2) State and local government vehicles five through twenty-five years old shall be inspected yearly as described in the table below.

Year	Model Year of Vehicles Needing Inspection
2002	1977 through 1997
2003	1978 through 1998
2004	1979 through 1999
2005	1980 through 2000
2006	1981 through 2001
2007	1982 through 2002
2008	1983 through 2003
2009	1984 through 2004
2010	1985 through 2005
2011	1986 through 2006
2012	1987 through 2007

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-031, filed 6/3/02, effective 7/4/02; 00-22-120 (Order 00-15), § 173-422-031, filed 11/1/00, effective 12/2/00.]

WAC 173-422-035 Registration requirements. (1) Persons residing in emission contributing areas as defined under WAC 173-422-050 shall register their motor vehicles within that area.

(2) Any person who violates this section shall reregister their motor vehicle within the emission contributing area, obtain a certificate of compliance or acceptance within thirty days, and is subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(3) Any civil penalty imposed by the department hereunder shall be appealable to the pollution control hearings board as provided for in chapter 43.21B RCW.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-035, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-035, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-035, filed 3/6/90, effective 4/6/90.]

WAC 173-422-040 Noncompliance areas. The following areas are designated noncompliance areas for the air contaminants specified: Carbon monoxide

(1) The city of Seattle.

(2) The city of Bellevue.

(3) The city of Spokane.

(4) The city of Tacoma.

(5) The city of Vancouver.

(6) The city of Everett.

[Statutory Authority: Chapter 70.120 RCW. 93-10-062 (Order 91-46), § 173-422-040, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-040, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-040, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-040, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-040, filed 2/28/80.]

WAC 173-422-050 Emission contributing areas. Emission contributing areas within which the motor vehicle emission inspection program applies are designated by the following United States Postal Service ZIP codes as of September 1, 1994, set forth below:

(1) Puget Sound Region

98001	98036	98083
98002	98037	98092
98003	98038	98093
98004	98039	98101 thru 98199
98005	98040	inclusive except 98110
98006	98041	98201 thru 98208
98007	98042	98258
98008	98043	98270
98009	98046	98271
98011	98047	98275
98012	98052	98290
98015	98053	98291
98020	98054	98327
98021	98055	98332
98023	98056	98335
98025	98057	98338
98026	98058	98344
98027	98059	98352
98028	98062	98354
98031	98063	98371 thru 98374
98032	98064	98387
98033	98071	98388
98034	98072	98390
98035	98073	98401 thru 98499

(2) Spokane Region

99001
99005
99014
99016
99019
99021
99025
99027
99037
99201 thru 99299

(3) Vancouver Region

98604 except north of N.E. 279th Street
98606
98607
98629 except east of N.E. 50th Avenue
98642
98660 thru 98668
98671 except Skamania County
98682-86

[Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-050, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-050, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-050, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-050, filed 5/3/93, effective 6/3/93; 84-09-087 (Order DE 84-7), § 173-422-050, filed 4/18/84. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-050, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-050, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-050, filed 2/28/80.]

WAC 173-422-060 Gasoline vehicle emission standards. Gasoline motor vehicles subject to this chapter shall:

(1) When tested using the exhaust emission testing procedures described in (II) Two Speed Idle Test of Appendix B Test Procedures of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of Chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, meet the applicable exhaust emission standards from the following table during both the idle and higher speed mode.

Two Speed Idle Test Exhaust Emission Standards

Model Year	CO(%)*	HC (ppm)*
80 and earlier	3.0	600
81 and newer (0-8500 GVWR)	1.2	220
81 and newer (Greater than 8500 GVWR)	3.0	400

* Carbon monoxide (CO) and hydrocarbons (HC), measured as a percentage (%) or parts per million (ppm) of the exhaust volume.

(2) When tested using the acceleration simulation mode (ASM) procedure specified in WAC 173-422-070 meet the following standards during that mode and the applicable standard from WAC 173-422-060(1) during the idle mode.

ASM Mode Exhaust Emission Standards

Model Year Test Weight (lbs.)	CO(%)*	HC(ppm)
1980 and earlier model year cars and trucks (0-8500 lbs. GVWR)		
1750	4.2	400
1875	4.0	380
2000	3.8	350
2125	3.6	340
2250	3.4	320
2375	3.2	300
2500	3.0	290
2625	2.9	270

Model Year Test Weight (lbs.)	CO(%)*	HC(ppm)
2750	2.8	260
2875	2.7	250
3000	2.6	240
3125	2.5	230
3250	2.4	220
3375	2.3	220
3500	2.2	210
3625	2.1	200
cars 3750 & greater	2.1	200
trucks 3750 & greater	2.5	300
1981 & later model year cars and trucks (0-8500 lbs. GVWR)		
1750	1.8	250
1875	1.7	240
2000	1.6	220
2125	1.5	210
2250	1.5	200
2375	1.4	190
2500	1.3	180
2625	1.3	180
2750	1.2	170
2875	1.2	160
3000	1.1	160
3125	1.1	150
3250	1.0	150
3375	1.0	150
3500	1.0	150
3625	1.0	150
cars 3750 & greater	1.0	150
trucks 3750 & greater	1.5	200

* Carbon monoxide (CO) and hydrocarbons (HC), measured as a percentage (%) or parts per million (ppm) of the exhaust volume.

(3) The gasoline filler cap must not leak more than 60 cubic centimeters per minute at a pressure of 30 inches of water.

(4) Standardized on-board diagnostic (OBD) systems (also known as OBDII) were required by Environmental Protection Agency starting with 1996 model gasoline vehicle cars and light trucks. If a 1996 or newer model vehicle is equipped with an Environmental Protection Agency certified on-board diagnostic (OBD) system, the information stored in the on-board computer must indicate that all emission-related functional checks have been completed except for 1996 to 2000 model year vehicles that can have up to two readiness monitors not set to ready, or 2001 or newer model year vehicles that have one readiness monitor not set to ready, and no malfunctions detected that would command the malfunction indicator light to be illuminated.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-060, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-060, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-060, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-060, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-060, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-060, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-060, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-060, filed 2/28/80.]

WAC 173-422-065 Diesel vehicle exhaust emission standards. (1) Diesel motor vehicles subject to this chapter shall meet the following opacity standards when using the snap-acceleration test procedures specified in WAC 173-422-075.

Model Year	Opacity (%)
1991 and earlier	55
1992 and later	40

(2) When using the Acceleration Simulation Mode (ASM) test procedures specified in WAC 173-422-070 adapted for the testing of diesel cars or light trucks (0-8500 pounds gross vehicle weight rating), these vehicles shall meet a 20% opacity standard.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-065, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-065, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-065, filed 5/3/93, effective 6/3/93.]

WAC 173-422-070 Gasoline vehicle exhaust emission testing procedures. All persons certified by, or under contract to, the department to conduct motor vehicle emission inspections shall use the exhaust emission testing procedures described in (II) Two Speed Idle Test of Appendix B-Test Procedures of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, except that the department may require that the following Acceleration Simulation Mode (ASM) test procedure replace the 2500 rpm mode of the Two Speed Idle Test. Equivalent procedures may be approved by the department.

Variations to the procedures specified may be established by the department for all or certain vehicles. Vehicles, not repaired as required by an emission recall for which owner notification was attempted after January 1, 1995, shall not be inspected until compliance with the recall is established.

Acceleration Simulation Mode (ASM)

1. Dynamometer Load: Set dynamometer horsepower load equal to [Vehicle Weight (lbs.) + 300]/300. An Environmental Protection Agency specified loading may also be used.
2. Vehicle Gear Selection: Vehicles with automatic transmissions use Drive (not Overdrive), vehicles with manual transmissions use second gear. Shift to the next higher gear if the engine speed exceeds 2500 revolutions per minute.
3. Vehicle Speed: Set vehicle speed at 25 miles per hour (mph) 1.5 ± mph.
4. Pass or Fail Determinations: Once the vehicle has been operating at 25 mph for 15 seconds, begin measuring exhaust HC, CO, and CO2, each second. The reading for pass or fail determinations is the running average of five measurements. When a final pass or fail determination is made, this mode will be stopped and the final readings recorded.

5. Fast Pass: Once HC and CO readings are equal to or less than the HC and CO standards and are within 20 ppm HC and 0.20% CO of each other.
6. Fast Fail: The vehicle will fail after 15 or more seconds of measurements when the HC reading exceeds 1800 ppm, or the CO reading exceeds 9.0 percent.
7. Full Term Pass/Fail: The vehicle will pass or fail the ASM mode after 90 seconds of measurements unless emission readings are declining at a rate that indicates that a failing vehicle will pass within the next 30 seconds. Then the failing vehicle will receive up to an additional 30 seconds of measurements before the final pass/fail determination is made.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-070, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-070, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-070, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-070, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-070, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-070, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-070, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-070, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-070, filed 2/28/80.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-422-075 Diesel vehicle inspection procedure. Diesel vehicles shall be tested using the following snap-acceleration test procedure unless the department requires the Acceleration Simulation Mode (ASM) test procedure specified in WAC 173-422-070 adapted for the testing of diesel cars or light trucks (0-8500 pounds gross vehicle weight rating) be used in lieu of the snap-acceleration test procedure.

Prior to beginning the test verify the engine is within its normal operating temperature range, all vehicle accessories including air conditioning are off, the parking brake and an engine brake or retarder is off, the transmission is in neutral (and clutch released if manual transmission).

(1) The vehicle shall receive at least three preliminary snap-acceleration test cycles until consistent engine operation is achieved. The snap-acceleration test cycle consists of moving the accelerator pedal from normal idle as rapidly as possible to the full power position, then fully releasing the throttle so the engine returns to idle.

(2) Then perform additional snap-acceleration test cycles while measuring the smoke opacity with an opacity meter which meets the requirements specified in WAC 173-422-095. The engine must be allowed to remain at idle for at least ten seconds between snap-acceleration test cycles. If a subsequent snap-acceleration cycle is not begun within 45 seconds, the entire sequence of snap-acceleration test cycles must be restarted. The three preliminary snap-acceleration test cycles described in (1) need not be repeated.

(3) Record peak opacity readings from each snap-acceleration test cycle up to nine times if necessary to obtain a peak opacity reading and two consecutive peak readings that are equal to or less than the standard established in WAC 173-422-065.

If a peak opacity reading and two consecutive peak readings that are equal to or less than the standard established in WAC 173-422-065 are not obtained, the vehicle fails the test.

(4) Steps 2 and 3 are repeated for any additional exhaust pipes.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-075, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 94-05-039 (Order 93-10), § 173-422-075, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-075, filed 5/3/93, effective 6/3/93.]

WAC 173-422-090 Exhaust gas analyzer specifications. Only exhaust gas analyzers meeting the specifications contained in (I) Steady-State Exhaust Analysis System of Appendix D-Steady-State Short Test Equipment of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, at the time of certification testing may be used for certification testing, unless equivalent specifications have been approved by the department.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-090, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-090, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-090, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-090, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-090, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-090, filed 2/28/80.]

WAC 173-422-095 Exhaust opacity testing equipment. The exhaust opacity measurement shall be conducted using an opacity meter approved by the department.

The opacity meter shall:

(1) Automatically calibrates itself before each test.

(2) Provide for continuous measurement of exhaust opacity unaffected by rain or wind.

[Statutory Authority: Chapter 70.120 RCW. 94-05-039 (Order 93-10), § 173-422-095, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-095, filed 5/3/93, effective 6/3/93.]

WAC 173-422-100 Testing equipment maintenance and calibration. (1) Unless alternative procedures have been approved or required by the department all equipment used in the inspection shall be calibrated and maintained according to the manufacturer's specifications and recommendations. Complete logs as approved by the department shall be kept for maintenance, repair, and calibration.

(2) The procedures for equipment maintenance and calibration procedures described in (I) Steady-State Test Equipment of Appendix A-Calibrations, Adjustments and Quality Control of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, shall be followed by all testing facilities unless equivalent procedures have been approved by the department.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-100, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-100, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-100, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-100, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-100, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-100, filed 2/28/80.]

WAC 173-422-120 Quality assurance. The department, or its designee, may monitor the operation of each authorized emission inspection/certification facility with unidentified or unannounced and unscheduled inspections to check the calibration and maintenance of the exhaust analyzers, test procedures, and records.

The department (or its designee) may immediately require the suspension of vehicle inspections/certifications in all or part by the inspection/certification facility if violations of this chapter are found during an audit of the inspection facility.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-120, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-120, filed 5/3/93, effective 6/3/93. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-120, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-120, filed 2/28/80.]

WAC 173-422-130 Inspection fees. At an inspection facility operated under contract to the state, the fee for the first emission inspection on each vehicle applicable to a vehicle license year shall be fifteen or less dollars. If the vehicle fails, one reinspection will be provided free of charge at any inspection station operated under contract to the state, provided that the reinspection is applicable to the same vehicle license year. Any additional reinspection of a failed vehicle applicable to the same vehicle license year will require the payment of fifteen or less dollars.

[Statutory Authority: RCW 70.120.080, 70.120.170 (4)(a), 46.16.015 (2)(h) and 70.120.120. 99-24-021 (Order 99-19), § 173-422-130, filed 11/22/99, effective 12/31/99. Statutory Authority: Chapter 70.120 RCW. 94-05-039 (Order 93-10), § 173-422-130, filed 2/8/94, effective 3/11/94. Statutory Authority: RCW 70.120.170 (4)(a). 93-20-010 (Order 93-15), § 173-422-130, filed 9/22/93, effective 10/23/93. Statutory Authority: Chapter 70.120 RCW. 93-10-062 (Order 91-46), § 173-422-130, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-130, filed 3/6/90, effective 4/6/90. 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. 82-02-027 (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.]

WAC 173-422-145 Fraudulent certificates of compliance/acceptance. (1)(a) Obtaining or attempting to obtain a certificate of compliance by (i) providing false information or (ii) any fraudulent means; or

(b) Obtaining or attempting to obtain a certificate of acceptance (i) through the use of receipts or other documentation containing false information, or (ii) any fraudulent means shall be construed as a violation of these rules implementing chapter 70.94 RCW as supplemented by chapter 70.120 RCW.

(2) Any person who commits such violation or who aids or abets another in committing the same shall be subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(3) For the purposes of this section the term "expended" refers to the net actual cost to the vehicle owner in the purchase of repairs or parts derived after the amount of any rebate, discount or cash-return has been subtracted.

(4) Any civil penalty imposed by the department hereunder shall be appealable to the pollution control hearing board as provided for in chapter 43.21B RCW.

[Statutory Authority: Chapter 70.120 RCW. 90-06-062, § 173-422-145, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-145, filed 11/23/83, effective 1/2/84.]

WAC 173-422-160 Fleet and diesel owner vehicle testing requirements. The department may authorize emission inspections by fleet operators including government agencies and the owners of diesel motor vehicles with a gross vehicle weight rating in excess of 8500 pounds or by an automotive service or testing facility engaged by the vehicle owner for such activity. Authorizations to conduct emission tests and issue certificates of compliance under this section are limited to authorized fleet vehicles or diesel vehicles with a gross vehicle weight rating in excess of 8500 pounds.

(1) All persons engaged in testing of gasoline fleet or diesel vehicles must comply with all applicable provisions of this chapter except as approved by the department.

(2) All persons conducting tests for the purpose of issuing certificates for fleet or diesel vehicles shall be ecology authorized emission specialists.

(3) Legibly completed forms will constitute certificates of compliance for licensing purposes. Any person conducting testing under this section shall forward to the department within ten working days after the end of each month, a copy of each certificate of compliance issued during that month. Copies of each certificate of compliance shall be retained by the person issuing the certificate for at least two years from date of issuance. Alternative arrangements for providing and or storing this information using automated data storage devices may be approved or required by the department.

Forms must be purchased from the department in advance of issuance through payment of fifteen or less dollars to the department for each certificate requested. Refunds or credit may be given for unused certificates returned to the department.

Payment for fleet forms is waived for state and local government fleets.

Test forms provided under this section are official documents. Persons receiving the forms from the department are accountable for each form provided.

Voided forms must be handled the same as certificates of compliance. One copy shall be sent to the department within ten days after the end of the month in which the form was voided and one copy shall be retained by the person accountable for the forms for at least two years after date of voiding. Refunds will not be made for voided forms.

(4) All persons authorized to conduct fleet or government vehicle inspections under this section shall be subject to performance audits and compliance inspections by the department, during normal business hours.

(5) Fleet vehicles may be inspected any time between their scheduled license renewals.

(6) Certificates of acceptance may not be issued under this section.

[Statutory Authority: RCW 70.120.080, 70.120.170 (4)(a), 46.16.015 (2)(h) and 70.120.120. 99-24-021 (Order 99-19), § 173-422-160, filed 11/22/99, effective 12/31/99. Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-160, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-160, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-160, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-160, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW

70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-160, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-160, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-160, filed 2/28/80.]

WAC 173-422-170 Exemptions. The following motor vehicles are exempt from the inspection requirement:

(1) Vehicles proportionally registered pursuant to chapter 46.85 RCW.

(2) New motor vehicles whose equitable or legal title has never been transferred to a person who in good faith purchases the vehicle for purposes other than resale; this does not exempt motor vehicles that are or have been leased.

(3) Motor vehicles that use propulsion units powered exclusively by electricity.

(4) Motor-driven cycles as defined in chapter 46.04 RCW as amended.

(5) Farm vehicles as defined in chapter 46.04 RCW as amended.

(6) Vehicles not required to be licensed.

(7) Mopeds as defined in chapter 46.04 RCW as amended.

(8) Vehicles garaged and operated out of the emission contributing area.

(9) Vehicles registered with the state but not for highway use.

(10) Used vehicles at the time of sale by a Washington licensed motor vehicle dealer.

(11) Motor vehicles fueled by propane, compressed natural gas, or liquid petroleum gas and so registered by the department of licensing.

(12) Motor vehicles whose manufacturer or engine manufacturer provides information that the vehicle cannot meet emission standards because of its design. In lieu of exempting these vehicles, alternative standards and or inspection procedures may be established.

(13) Motor vehicles whose registered ownership is being transferred between parents, siblings, grandparents, grandchildren, spouse or present co-owners and all transfers to the legal owner or a public agency.

(14) Vehicles less than five years old.

(15) Vehicles more than twenty-five years old.

[Statutory Authority: RCW 70.120.120. 00-22-120 (Order 00-15), § 173-422-170, filed 11/1/00, effective 12/2/00. Statutory Authority: RCW 70.120.080, 70.120.170 (4)(a), 46.16.015 (2)(h) and 70.120.120. 99-24-021 (Order 99-19), § 173-422-170, filed 11/22/99, effective 12/31/99. Statutory Authority: Chapter 70.120 RCW. 96-23-030 (Order 96-11), § 173-422-170, filed 11/15/96, effective 12/16/96; 96-21-029 (Order 95-11), § 173-422-170, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-170, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-170, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-170, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-170, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-170, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-170, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-170, filed 2/28/80.]

WAC 173-422-175 Fraudulent exemptions. (1) Obtaining or attempting to obtain an exemption from emission inspection requirements by false statements, or failure to comply with the exemption procedures established to implement WAC 173-422-170, shall be construed as a violation of these rules implementing chapter 70.94 RCW as supplemented by chapter 70.120 RCW.

(2) Any person who commits such violation or who aids or abets another in committing the same shall be subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(3) Any civil penalty imposed by the department hereunder shall be appealable to the pollution control board as provided for in chapter 43.21B RCW.

[Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-175, filed 11/23/83, effective 1/2/84.]

WAC 173-422-190 Emission specialist authorization. (1) To become an authorized emission specialist an individual shall:

(a) Pass a course of study, approved by the department; and

(b) Agree in writing to meet the requirements of subsection (2) of this section and all requirements of law or regulation regarding the serving of motor vehicle emission control systems or the motor vehicle emission inspection program.

(2) To maintain certification, an authorized emission specialist shall:

(a) Successfully complete a department-approved course on emission repair within ninety days of being required to do so by the department unless an extension has been granted in writing by the department; and

(b) Sign, including the specialist identification number, all receipts and other forms required by the department for emission repairs or adjustments performed. These receipts must be prenumbered, preprinted with the business's name and address and clearly itemize all appropriate repairs performed by the specialist; and

(c) Record on all receipts:

(i) The vehicle's emission readings after appropriate repairs or the diagnosis and/or repair of problem(s) identified by the on-board diagnostic (OBD) during an emission inspection; and

(ii) A vehicle description including the license number and vehicle identification number (VIN); and

(iii) Any missing or inoperative primary emission control components; and

(iv) Any further recommended appropriate repairs; and

(d) Not tamper with emission control systems, including adjusting an engine outside of the manufacturer's specifications (chapter 173-421 WAC); and

(e) Not obtain or attempt to obtain a certificate of compliance, a certificate of acceptance (repair waiver) or an exemption from the inspection requirements by providing false information or by any fraudulent means (chapter 173-422 WAC); and

(f) Not aid or abet any individual in committing a violation of chapter 173-421 or 173-422 WAC.

(3) The certification of an authorized emission specialist may be revoked for a first violation of chapter 173-421 WAC or WAC 173-422-145, for a period of no more than one year, and may be permanently revoked for a second violation of chapter 173-421 or 173-422 WAC.

The certification of an authorized emission specialist may be temporarily revoked for violation of subsection (2) of this section and may be permanently revoked for continued willful violation of subsection (2) of this section.

An authorized emission specialist whose certification is revoked permanently or temporarily may appeal to the pollution control hearings board as provided for in RCW 43.21B.-310.

(4) An authorized emission specialist whose certification has been temporarily revoked may reapply for certification twelve months after the date of revocation by applying to the department and meeting all requirements of subsection (1) of this section. An application for certification by a permanently revoked authorized emission specialist will be denied.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-190, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-190, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-190, filed 2/28/95, effective 3/31/95; 90-06-062, § 173-422-190, filed 3/6/90, effective 4/6/90.]

WAC 173-422-195 Listing of authorized emission specialists. (1) A list of authorized emission specialists will be available to the public. Specialists will be listed under one employer's business name when the business is approved for listing. The list will be updated by the department at least once every six months.

(2) The employer's business name and address will be listed by the department, when the employer agrees in writing to:

(a) Require the use of a properly maintained and correctly calibrated exhaust analyzer and a scan tool capable of communicating with the on-board diagnostic (OBD) systems installed on all U.S. Environmental Protection Agency certified 1996 model year and newer gasoline vehicles to diagnosis emission test failures and as a final check for emission repairs or adjustments;

(b) Have all emission repairs or adjustments performed by an authorized emission specialist;

(c) Require the authorized emission specialist to sign the customer's receipt for emission repairs or adjustments, and to record the vehicle's emission readings or which problem(s) identified by the on-board diagnostic (OBD) system during an emission inspection that have been diagnosed and/or repaired on the receipt after the work is completed;

(d) Require that all employees not aid or abet any person to tamper with emission control systems, including adjusting a vehicle outside of the manufacturer's specifications (chapter 173-421 WAC); and

(e) Require that all employees not aid or abet any person to obtain a fraudulent certificate of compliance, certificate of acceptance or an exemption from the inspection requirement (repair waiver) (chapter 173-422 WAC).

(f) Notify the department when an authorized emission specialist begins or ends employment.

(3) An employer may be removed from the authorized emission specialist list for a first violation of chapter 173-421 or 173-422 WAC for a period of no more than one year and may be permanently removed after a second violation of chapter 173-421 or 173-422 WAC.

An employer may be temporarily removed from the authorized emission specialist list when failing to comply with the requirements of subsection (2) of this section and may be permanently revoked for continued and willful violation of subsection (2) of this section.

(4) An employer who has been temporarily removed from the authorized emission specialist list may reapply for listing twelve months after the date of removal from the listing by applying to the department and meeting all requirements of subsection (2) of this section. An application for listing from an employer permanently removed from the authorized emission specialist list will be denied.

(5) An employer who is removed from an authorized emission specialist list or denied listing in an authorized emission specialist list may appeal to the pollution control hearings board as provided for in RCW 43.21B.310.

(6)(a) An employer approved for listing may display the "state authorized emission specialist" sign available from the department. Any employer advertising or providing of information to the public based on the department's certification of an authorized emission specialist must be discontinued immediately when the employer no longer meets the requirements.

(b) An employer violating (a) of this subsection shall be subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(c) A civil penalty imposed by the department may be appealed to the pollution control hearings board as provided for in RCW 43.21B.310.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-195, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-195, filed 2/28/95, effective 3/31/95; 90-06-062, § 173-422-195, filed 3/6/90, effective 4/6/90.]

Chapter 173-425 WAC
OUTDOOR BURNING

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-425-035	Episodes. [Order DE 77-19, § 173-425-035, filed 10/24/77. Formerly WAC 18-12-035.] Repealed by 89-02-055 (Order 88-39), filed 1/3/89. Statutory Authority: Chapters 70.94 and 43.21A RCW.
173-425-036	Curtailment during episodes or impaired air quality. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-036, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-036, filed 1/3/89.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.
173-425-045	Prohibited materials. [Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-045, filed 1/3/89; Order DE 77-19, § 173-425-045, filed 10/24/77. Formerly WAC 18-12-045.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92,

effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-055 Exceptions. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-055, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-055, filed 10/24/77. Formerly WAC 18-12-055.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-065 Residential open burning. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-065, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-065, filed 1/3/89; Order DE 77-19, § 173-425-065, filed 10/24/77. Formerly WAC 18-12-065.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-075 Commercial open burning. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-075, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-075, filed 1/3/89; Order DE 77-19, § 173-425-075, filed 10/24/77. Formerly WAC 18-12-075.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-085 Agricultural open burning. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-085, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-085, filed 1/3/89; Order DE 77-19, § 173-425-085, filed 10/24/77. Formerly WAC 18-12-085.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-090 Local air authority may issue variance. [Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-090, filed 12/1/92, effective 1/1/93.] Repealed by 00-07-066 (Order 97-39), filed 3/13/00, effective 4/13/00. Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02.

173-425-095 No burn area designation. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-095, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-095, filed 1/3/89; Order DE 77-19, § 173-425-095, filed 10/24/77. Formerly WAC 18-12-095.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-100 Penalties. [Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-100, filed 12/1/92, effective 1/1/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-100, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-100, filed 10/24/77. Formerly WAC 18-12-100.] Repealed by 00-07-066 (Order 97-39), filed 3/13/00, effective 4/13/00. Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02.

173-425-110 Severability. [Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-110, filed 12/1/92, effective 1/1/93.] Repealed by 00-07-066 (Order 97-39), filed 3/13/00, effective 4/13/00. Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02.

173-425-115 Land clearing projects. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-115, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-115, filed 10/24/77. Formerly WAC 18-12-115.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-120 Department of natural resources—Smoke management plan. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-120, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-120, filed 10/24/77. Formerly WAC 18-12-120.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-130 Notice of violation. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-130, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-130, filed 1/3/89; Order DE 77-19, § 173-425-130, filed 10/24/77. Formerly WAC 18-12-130.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-140 Remedies. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-140, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-140, filed 10/24/77. Formerly WAC 18-12-140.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

WAC 173-425-010 Purpose. The purpose of this rule is to establish a program to implement the limited burning policy authorized by sections 743 through 765 of the Washington Clean Air Act (chapter 70.94 RCW) and other provisions of the act that pertain to outdoor burning (except any outdoor burning listed in WAC 173-425-020(1)). Statutory authority for particular provisions of the rule is shown in parentheses throughout the rule.

The limited burning policy requires ecology and other agencies to:

(1) Reduce outdoor burning to the greatest extent practical, especially by prohibiting it in certain circumstances; (RCW 70.94.743(1))

(2) Establish a permit program for limited burning, one that requires permits for most types of outdoor burning; and (RCW 70.94.745)

(3) Foster and encourage development of reasonable alternatives to burning. (RCW 70.94.745(6))

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-010, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-010, filed 12/1/92, effective 1/1/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-010, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-010, filed 10/24/77. Formerly WAC 18-12-010.]

WAC 173-425-020 Applicability. (1) This chapter applies to all outdoor burning in the state except:

(a) Agricultural burning (which is governed by chapter 173-430 WAC);

(b) Silvicultural burning (which is governed by chapter 332-24 WAC, the Washington state smoke management plan, and various laws including chapter 70.94 RCW); and

(c) Any outdoor burning on lands within the exterior boundaries of Indian reservations (unless provided for by intergovernmental agreement).

(2) Specifically, this chapter applies to:

(a) Residential burning. (RCW 70.94.745)

(b) Land clearing burning. (RCW 70.94.745)

(c) Storm or flood debris burning. (RCW 70.94.743)

(d) Tumbleweed burning. (RCW 70.94.745)

(e) Weed abatement fires. (RCW 70.94.650)

(f) Fire fighting instruction fires. (RCW 70.94.650)

(g) Rare and endangered plant regeneration fires. (RCW 70.94.651)

(h) Indian ceremonial fires. (RCW 70.94.651)

(i) Recreational fires. (RCW 70.94.765)

(j) Other outdoor burning. (RCW 70.94.765)

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-020, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-020, filed 12/1/92, effective 1/1/93. Statutory

Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-020, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-020, filed 10/24/77. Formerly WAC 18-12-020.]

WAC 173-425-030 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter shall have the following meanings:

(1) **"Agricultural burning"** means outdoor burning regulated under chapter 173-430 WAC, including, but not limited to, any incidental agricultural burning or agricultural burning for pest or disease control.

(2) **"Air pollution episode"** means a period when a forecast, alert, warning, or emergency air pollution stage is declared, as stated in chapter 173-435 WAC.

(3) **"Construction/demolition debris"** means all material resulting from the construction, renovation, or demolition of buildings, roads, and other man-made structures.

(4) **"Ecology"** means the Washington state department of ecology.

(5) **"Fire fighting instruction fires"** means fires for instruction in methods of fire fighting, including, but not limited to, training to fight structural fires, aircraft crash rescue fires, and forest fires.

(6) **"Firewood"** means bare untreated wood used as fuel in a solid fuel burning device, Indian ceremonial fire, or recreational fire.

(7) **"Impaired air quality"** means a first or second stage impaired air quality condition declared by ecology or a local air authority in accordance with WAC 173-433-140.

(8) **"Indian ceremonial fires"** means fires necessary for Native American ceremonies (i.e., conducted by and for Native Americans) if part of a religious ritual.

(9) **"Land clearing burning"** means outdoor burning of trees, stumps, shrubbery, or other natural vegetation from land clearing projects (i.e., projects that clear the land surface so it can be developed, used for a different purpose, or left unused). (RCW 70.94.750(2))

(10) **"Local air authority"** means an air pollution control authority activated under chapter 70.94 RCW that has jurisdiction over the subject source.

(11) **"Natural vegetation"** means unprocessed plant material from herbs, shrubbery, and trees, including grass, weeds, leaves, clippings, prunings, brush, branches, roots, stumps, and trunk wood.

(12) **"Nonattainment area"** means a clearly delineated geographic area which has been designated by the Environmental Protection Agency because it does not meet (or it contributes to ambient air quality in a nearby area that does not meet) a national ambient air quality standard or standards for one or more of the criteria pollutants, which include carbon monoxide, particulate matter (PM-10 and PM2.5), sulfur dioxide, nitrogen dioxide, lead, and ozone.

(13) **"Nonurban areas"** means unincorporated areas within a county that are not designated as an urban growth area. (RCW 70.94.745(8))

(14) **"Nuisance"** means an emission of smoke or any other air contaminant that unreasonably interferes with the use and enjoyment of the property upon which it is deposited. (RCW 70.94.030(2))

(15) **"Other outdoor burning"** means any type of outdoor burning not specified in WAC 173-425-020 (1) or (2)(a) through (i), including, but not limited to, any outdoor burning necessary to protect public health and safety. (RCW 70.94.650(7) and 70.94.765)

(16) **"Outdoor burning"** means the combustion of material of any type in an open fire or in an outdoor container without providing for the control of combustion or the control of emissions from the combustion. For the purposes of this rule, "outdoor burning" means all types of outdoor burning except agricultural burning and silvicultural burning. (RCW 70.94.743(2))

(17) **"Permitting agency"** means the agency responsible for issuing permits (including adopting a general permit) for, and/or enforcing all requirements of this chapter that apply to, a particular type of burning in a given area (unless another agency agrees to be responsible for certain enforcement activities in accordance with WAC 173-425-060 (1)(a) and (6)).

(18) **"Pollutants emitted by outdoor burning"** means carbon monoxide, carbon dioxide, particulate matter, sulfur dioxide, nitrogen oxides, lead, and various volatile organic compounds and toxic substances.

(19) **"Rare and endangered plant regeneration fires"** means fires necessary to promote the regeneration of rare and endangered plants found within natural area preserves as identified in chapter 79.70 RCW.

(20) **"Reasonable alternative"** means a method for disposing of organic refuse (such as natural vegetation) that is available, reasonably economical, and less harmful to the environment than burning.

(21) **"Recreational fire"** means cooking fires, campfires, and bonfires using charcoal or firewood that occur in designated areas or on private property for cooking, pleasure, or ceremonial purposes. Fires used for debris disposal purposes are not considered recreational fires.

(22) **"Residential burning"** means the outdoor burning of leaves, clippings, prunings and other yard and gardening refuse originating on lands immediately adjacent and in close proximity to a human dwelling and burned on such lands by the property owner or his or her designee. (RCW 70.94.750(1))

(23) **"Silvicultural burning"** means outdoor burning relating to the following activities for the protection of life or property and/or the public health, safety, and welfare:

(a) Abating a forest fire hazard;

(b) Prevention of a forest fire hazard;

(c) Instruction of public officials in methods of forest fire fighting;

(d) Any silvicultural operation to improve the forest lands of the state; and

(e) Silvicultural burning used to improve or maintain fire dependent ecosystems for rare plants or animals within state, federal, and private natural area preserves, natural resource conservation areas, parks, and other wildlife areas. (RCW 70.94.660(1))

(24) **"Storm or flood debris burning"** means fires consisting of natural vegetation deposited on lands by storms or floods that have occurred in the previous two years and resulted in an emergency being declared or proclaimed in the area by the city, county, or state government and burned on such lands by the property owner or his or her designee. (RCW 70.94.743 (1)(c))

(25) **"Tumbleweed burning"** means outdoor burning to dispose of dry plants (typically Russian Thistle and Tumbleweed Mustard plants) that have been broken off, and rolled about, by the wind.

(26) **"Urban growth area"** means land, generally including and associated with an incorporated city, designated by a county for urban growth under RCW 36.70A.030.

(27) **"Weed abatement fires"** means any outdoor burning to dispose of weeds that is not regulated under chapter 173-430 WAC, which applies to agricultural burning.

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-030, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-030, filed 12/1/92, effective 1/1/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-030, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-030, filed 1/3/89; Order DE 77-19, § 173-425-030, filed 10/24/77. Formerly WAC 18-12-030.]

WAC 173-425-040 Areas where certain types of outdoor burning are prohibited. (1) **Nonattainment areas.** Residential burning and land clearing burning may not be allowed in any areas of the state that exceed federal or state ambient air quality standards for pollutants emitted by outdoor burning. These areas are limited to all nonattainment areas and former nonattainment areas for carbon monoxide, particulate matter (PM-10 and PM2.5), sulfur dioxide, nitrogen dioxide, and lead. However, ecology may, in cooperation with any local air authority having jurisdiction, authorize the omission of parts of a nonattainment area if ambient air quality standards for the pollutants that caused the area to be designated nonattainment have not been exceeded in those parts, and outdoor burning in those parts has not contributed, and is not expected to contribute, significantly to exceedances of the standards in the nonattainment area. (RCW 70.94.743 (1)(a))

(2) **Urban growth areas.** Residential burning and land clearing burning may not be allowed in any urban growth areas after December 31, 2000, except as follows: Residential burning and land clearing burning may be allowed in the following types of urban growth areas until December 31, 2006: (RCW 70.94.743 (1)(b))

(a) Urban growth areas for incorporated cities having a population of less than five thousand people that are neither within nor contiguous with any area identified in subsection (1) of this section; and

(b) Urban growth areas that do not include an incorporated city.

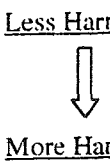
(3) **Cities over 10,000.** Residential burning and land clearing burning may not be allowed in any cities having a population greater than ten thousand people after December 31, 2000. Cities having this population must be identified by using the most current population estimates available for each city. (RCW 70.94.743 (1)(b))

(4) **High density areas.** Land clearing burning may not be allowed in any area having a general population density of one thousand or more persons per square mile after December 31, 2000, if the area is contiguous with any area where land clearing burning has already been, or must be, prohibited by that date under subsection (1), (2), or (3) of this section, and it may not be allowed in any other areas having this density after December 31, 2006. All areas having this density must be identified by using the most current population data available for each census block group and dividing by the land area of the block group in square miles. (RCW 70.94.750(2))

(5) **Areas with a reasonable alternative to burning.** Residential burning, land clearing burning, storm or flood debris burning, tumbleweed burning, weed abatement fires, and other outdoor burning of organic refuse may not be allowed in any area of the state (including any areas or parts of areas identified in subsections (1) through (4) of this section) when a reasonable alternative to burning is found to exist in the area for that type of burning. (RCW 70.94.745(6))

By December 31, 2000, and at least every third year after that, each local air authority, and ecology in cooperation with counties, must determine whether any areas within their jurisdiction where a type of burning listed in this subsection is allowed (except other outdoor burning of organic refuse) have a reasonable alternative to burning. Determinations for other outdoor burning of organic refuse must be made on a permit-by-permit basis by applying the criteria in (a) and (b) of this subsection. A reasonable alternative exists for any area where the answers to both of the following questions are "Yes" for the specified type of burning: Provided, That parts of an area may be excluded for the purpose of defining practical boundaries for the area.

	Yes	No
(a) **Available and reasonably economical.** Is the area served by: (i) A county or municipally-sponsored service for recycling (i.e. composting) of the organic refuse (e.g. natural vegetation); or (ii) Any other method for disposing of the organic refuse (such as a public or private chipping or chipper rental service, an energy recovery or incineration facility, or a solid waste drop box, transfer station, or landfill) that is located within a reasonable distance and will accept the type and volume of organic refuse at a cost that is less than or equivalent to the median of all county tipping fees in the state for disposal of municipal solid waste?	❑	❑
(b) **Less harmful to the environment.** Is any available and reasonably economical alternative method for disposing of the organic refuse less harmful to the environment than outdoor burning according to the following hierarchy?:	❑	❑



[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-040, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-040, filed 12/1/92, effective 1/1/93.]

WAC 173-425-050 Other prohibitions/requirements that apply to all outdoor burning. No person may cause or allow an outdoor fire in an area where the type of burning involved is prohibited under WAC 173-425-040, or where it requires a permit under WAC 173-425-060(2), unless a permit has been issued and is in effect. In addition, the following general requirements apply to all outdoor burning regulated by this chapter, including any outdoor burning allowed without a permit under WAC 173-425-060(2), unless a specific exception is stated in this section:

(1) **Prohibited materials.** The following materials may not be burned in any outdoor fire: Garbage, dead animals, asphalt, petroleum products, paints, rubber products, plastics, paper (other than what is necessary to start a fire), cardboard, treated wood, construction/demolition debris, metal, or any substance (other than natural vegetation) that normally releases toxic emissions, dense smoke, or obnoxious odors when burned, except that: (RCW 70.94.775(1) and Attorney General Opinion 1993 #17)

(a) Fire fighting instruction fires for aircraft crash rescue training fires approved and conducted in compliance with RCW 70.94.650(5) may contain uncontaminated petroleum products. (RCW 70.94.650(6))

(b) Ecology or a local air authority may allow the limited burning of prohibited materials for other fire fighting instruction fires, including those that are exempt from permits under WAC 173-425-060 (2)(f), and other outdoor burning necessary to protect public health and safety. (RCW 70.94.650(7))

(2) **Hauled material.** No outdoor fire may contain material (other than firewood) that has been hauled from an area where outdoor burning of the material is prohibited under WAC 173-425-040. Any outdoor burning of material hauled from areas where outdoor burning of the material is allowed requires an appropriate permit under WAC 173-425-060(2), and any use of property for this purpose on an on-going basis, must be limited to the types of burning listed in WAC 173-351-200 (5)(b) (criteria for municipal solid waste landfills) and approved in accordance with other laws, including chapter 173-304 WAC (Minimum functional standards for solid waste handling) and chapter 173-400 WAC (General regulations for air pollution sources). (RCW 70.94.745(6))

(3) **Curtailments.**

(a) No outdoor fire may be ignited in a geographical area where:

(i) Ecology has declared an air pollution episode; (RCW 70.94.775(2) and 70.94.780)

(ii) Ecology or a local air authority has declared impaired air quality; or (RCW 70.94.775(2) and 70.94.780)

(iii) The appropriate fire protection authority has declared a fire danger burn ban, unless that authority grants an exception.

(b) The person responsible for the fire must contact the permitting agency and/or any other designated source for information on the burning conditions for each day.

(c) The person responsible for an outdoor fire must extinguish the fire when an air pollution episode, impaired air quality condition, or fire danger burn ban that applies to the burning, is declared. In this regard:

(i) Smoke visible from all types of outdoor burning, except land clearing burning, after a time period of three hours has elapsed from the time an air pollution episode, impaired air quality condition, or fire danger burn ban is declared, will constitute prima facie evidence of unlawful outdoor burning.

(ii) Smoke visible from land clearing burning after a time period of eight hours has elapsed from the time an air pollution episode, impaired air quality condition, or fire danger burn ban is declared, will constitute prima facie evidence of unlawful outdoor burning.

(4) **Unlawful outdoor burning:** It is unlawful for any person to cause or allow outdoor burning that causes an emission of smoke or any other air contaminant that is detrimental to the health, safety, or welfare of any person, that causes damage to property or business, or that causes a nuisance. (RCW 70.94.040, 70.94.650(1), and 70.94.780)

(a) Any person affected by outdoor burning may file a complaint with the permitting agency or other designated enforcing agency.

(b) Any agency responding to an outdoor burning complaint should attempt to determine if the burning on any particular property is unlawful. This may include, but is not limited to, considering whether the burning has caused an emission of smoke or any other air contaminant in sufficient quantity to be unlawful.

(c) Any person responsible for such unlawful outdoor burning must immediately extinguish the fire.

(5) **Burning in outdoor containers.** Outdoor containers (such as burn barrels and other incinerators not regulated under WAC 173-400-070(1)) used for outdoor burning, must be constructed of concrete or masonry with a completely enclosed combustion chamber and equipped with a permanently attached spark arrester constructed of iron, heavy wire mesh, or other noncombustible material with openings not larger than one-half inch, and they may only be used in compliance with this chapter.

(6) **Other general requirements:**

(a) A person capable of extinguishing the fire must attend it at all times, and the fire must be extinguished before leaving it.

(b) No fires are to be within fifty feet of structures.

(c) Permission from a landowner, or owner's designated representative, must be obtained before starting an outdoor fire.

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-050, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-050, filed 12/1/92, effective 1/1/93.]

WAC 173-425-060 Outdoor burning permit program/requirements. (1) **Permit program.**

(a) Ecology or local air authorities may consult with fire protection authorities, conservation districts, or counties to determine if any of these agencies are capable and willing to serve as the permitting agency and/or enforcing agency for particular types of burning in an area of the state. Ecology or local air authorities may enter into agreements with any capable agencies to identify the permitting agencies and enforcing agencies for each type of burning and determine the type of permit appropriate for each area where a permit is required. (RCW 70.94.654)

(b) Permitting agencies may use, as appropriate, a verbal, electronic, written, or general permit established by rule, for any type of burning that requires a permit: Provided, That a written permit should be used, where feasible, for land clearing burning, storm or flood debris burning in areas where residential burning and land clearing burning are prohibited under WAC 173-425-040 (1), (2), or (3), and other outdoor burning (except any other outdoor burning necessary to protect public health and safety). (RCW 70.94.745(4))

(c) The rule for a general permit must establish periods of time when any burning under the permit must occur. General permits must also include all appropriate conditions for burning as stated in subsection (4) of this section.

(2) **Types of burning that require a permit.** Except as otherwise stated, a permit is required for the following types of outdoor burning in all areas of the state under the jurisdiction of this chapter:

(a) Residential burning (except in the nonurban areas of any county with an unincorporated population of less than fifty thousand; (RCW 70.94.745(2))

(b) Land clearing burning; (RCW 70.94.745(2))

(c) Storm or flood debris burning; (RCW 70.94.743 (1)(c))

(d) Tumbleweed burning (except in counties with a population of less than two hundred fifty thousand); (RCW 70.94.745(5))

(e) Weed abatement fires; (RCW 70.94.650 (1)(a))

(f) Fire fighting instruction fires for training to fight structural fires in urban growth areas and cities with a population over ten thousand, and all other fire fighting instruction fires, except fire fighting instruction fires for training to fight structural fires as provided in RCW 52.12.150, aircraft crash rescue fires as provided in RCW 70.94.650(5), and forest fires; (RCW 70.94.650 (1)(b))

(g) Rare and endangered plant regeneration fires; (RCW 70.94.651(1))

(h) Indian ceremonial fires (except on lands within the exterior boundaries of Indian reservations unless provided for by intergovernmental agreement); (RCW 70.94.651(2))

(i) Recreational fires with a total fuel area that is greater than three feet in diameter and/or two feet in height (except in the nonurban areas of counties with an unincorporated population of less than fifty thousand; and (RCW 70.94.765)

(j) Other outdoor burning (if specifically authorized by the local air authority or ecology). (RCW 70.94.765)

(3) **Fees.** Permitting agencies may charge a fee for any permit issued under the authority of this chapter: Provided, That a fee must be charged for all permits issued for weed abatement fires and fire fighting instruction fires. All fees must be set by rule and must not exceed the level necessary to recover the costs of administering and enforcing the permit program. (RCW 70.94.650(2) and 70.94.780)

(4) **Permit decisions.** Permitting agencies must approve with conditions, or deny outdoor burning permits as needed to achieve compliance with this chapter. All permits must include conditions to satisfy the requirements in WAC 173-425-050, and they may require other conditions, such as restricting the time period for burning, restricting permissible hours of burning, imposing requirements for good combustion practice, and restricting burning to specified weather conditions. Permitting agencies may also include conditions to comply with other laws pertaining to outdoor burning. (RCW 70.94.745, 70.94.750, and 70.94.780)

(5) **Establishment of a general permit and requirements for residential burning.**

(a) A general permit for residential burning is hereby adopted for use in any area where ecology (or a local air authority that has adopted this general permit by reference) and any designated enforcing agencies have agreed that a general permit is appropriate for residential burning, and have notified the public where the permit applies. All burning under this permit must comply with the conditions in (c) of this subsection, and it must be restricted to the first and second weekends (Saturday and Sunday) in April and the third and fourth weekends in October, unless alternative days are substituted by the enforcing agency and adequate notice of the substitution is provided to the public. Alternative days may only be substituted if conditions on the prescribed days are unsuitable due to such things as poor air quality, high fire danger, unfavorable meteorology, likely interference with a major community event, or difficulties for enforcement. (RCW 70.94.745(4))

(b) Local air authorities may also adopt a general permit for residential burning that prescribes a different set of days, not to exceed eight days per year, when any burning under the permit must occur: Provided, That the public must be given adequate notice regarding where and when the permit will apply. (RCW 70.94.745(4))

(c) The following conditions apply to all residential burning allowed without a permit under WAC 173-425-060 (2)(a) or allowed under a general, verbal, or electronic permit:

(i) The person responsible for the fire must contact the permitting agency and/or any other designated source for information on the burning conditions for each day.

(ii) A fire may not be ignited, and must be extinguished, if an air pollution episode, impaired air quality condition, or fire danger burn ban that applies to the burning, is declared for the area.

(iii) The fire must not include garbage, dead animals, asphalt, petroleum products, paints, rubber products, plastics, paper (other than what is necessary to start a fire), cardboard, treated wood, construction/demolition debris, metal, or any substance (other than natural vegetation) that normally releases toxic emissions, dense smoke, or obnoxious odors when burned.

(iv) The fire must not include materials hauled from another property.

(v) If any emission from the fire is detrimental to the health, safety, or welfare of any person, if it causes damage to property or business, or if it causes a nuisance, the fire must be extinguished immediately.

(vi) A person capable of extinguishing the fire must attend it at all times, and the fire must be extinguished before leaving it.

(vii) No fires are to be within fifty feet of structures.

(viii) Permission from a landowner, or owner's designated representative, must be obtained before starting an outdoor fire.

(ix) Any burn pile must not be larger than four feet by four feet by three feet.

(x) Only one pile at a time may be burned, and each pile must be extinguished before lighting another.

(xi) If an outdoor container is used for burning, it must be constructed of concrete or masonry with a completely enclosed combustion chamber and equipped with a permanently attached spark arrester constructed of iron, heavy wire mesh, or other noncombustible material with openings not larger than one-half inch.

(xii) No fire is permitted within five hundred feet of forest slash.

Persons not able to meet these requirements or the requirements in WAC 173-425-050 must apply for and receive a written permit before burning. Failure to comply with all requirements of this subsection voids any applicable permit, and the person responsible for burning may be subject to enforcement action under subsection (6) of this section.

(6) **Field response and enforcement.** Any agency that issues permits, or adopts a general permit for any type of burning in an area, is responsible for field response to outdoor burning complaints and enforcement of all permit conditions and requirements of this chapter related to that type of burning in the area, unless another agency has agreed under WAC 173-425-060 (1)(a) to be responsible for certain field response or enforcement activities. Except for enforcing WAC 173-425-050 (3)(a)(iii), local air authorities and ecology may also perform these activities. Local air authorities or ecology will also be responsible for enforcing any requirements that apply to burning that is prohibited or exempt from permits in areas under their jurisdiction, unless another agency agrees to be responsible.

Permitting agencies and enforcing agencies may require that corrective action be taken, and may assess penalties to the extent allowed under their general and specific authorities if they discover noncompliance with this chapter. A fire protection authority called to respond to, control, or extinguish an illegal or out-of-control fire may charge, and recover from the person responsible for the fire, the costs of its response and control action.

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-060, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-060, filed 12/1/92, effective 1/1/93.]

WAC 173-425-070 Variances. Any person who proposes to engage in outdoor burning may apply to ecology or a local air authority for a variance from provisions of this chapter governing the quality, nature, duration, or extent of discharges of air contaminants from the proposed burning. All variance applications must be reviewed, and approved or disapproved, in accordance with RCW 70.94.181. (RCW 70.94.181)

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-070, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-070, filed 12/1/92, effective 1/1/93.]

WAC 173-425-080 Severability. The provisions of this regulation are severable. If any provision is held invalid, the application of that provision to other circumstances and the remainder of the regulation will not be affected.

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-080, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-080, filed 12/1/92, effective 1/1/93.]

Chapter 173-430 WAC
AGRICULTURAL BURNING

WAC

WAC 173-430-010 Purpose of the regulation. This chapter, promulgated under chapter 70.94 RCW, the Washington Clean Air Act, authorizes the department of ecology to implement the provisions of that act. This rule establishes controls for agricultural burning in the state in order to minimize adverse health and the environment effects from agricultural burning. The control strategies include:

(1) Establishing a permit program with minimum statewide requirements.

(2) Providing for implementation of a research program to explore and identify economical and practical alternatives to agricultural burning.

(3) Encouraging and developing economically feasible alternative methods to agricultural burning.

(4) Limiting the scope of the rule to agricultural burning and distinguishing between agricultural burning and other types of burning.

(5) Providing for local administration of the permitting program through delegation.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-010, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-010, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-010, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-010, filed 11/9/77. Formerly WAC 18-16-010.]

WAC 173-430-020 General applicability. This regulation applies to burning related to agricultural activities and includes the burning of fields, prunings, weeds, and irrigation

ditches, drainage ditches, fence rows or other essential pathways. It does not apply to silvicultural burning or open burning.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-020, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-020, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-020, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-020, filed 11/9/77. Formerly WAC 18-16-020.]

WAC 173-430-030 Definition of terms. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the meanings of the following words and phrases used in this chapter are listed below.

(1) **Agricultural burning:** Means the burning of vegetative debris from an agricultural operation necessary for disease or pest control, necessary for crop propagation and/or crop rotation, or where identified as a best management practice by the agricultural burning practices and research task force established in RCW 70.94.650 or other authoritative source on agricultural practices.

(2) **Agricultural operation:** Means a farmer who can substantiate that the operation is commercial agriculture by showing the most recent year's IRS schedule F form or proof that the land is designated in a classification for agricultural use. It also includes burning conducted by irrigation district or drainage district personnel as part of water system management.

(3) **Ag task force:** Means the agricultural burning practices and research task force.

(4) **Best management practice:** Means the criteria established by the agricultural burning practices and research task force (Ag task force).

(5) **Certify:** Means to declare in writing, based on belief after reasonable inquiry, that the statements and information provided are true, accurate, and complete.

(6) **Department:** Means the department of ecology.

(7) **Farmer:** Means any person engaged in the business of growing or producing for sale upon their own lands, or upon the land in which they have a present right of possession, any agricultural product. Farmer does not mean persons using such products as ingredients in a manufacturing process, or persons growing or producing such products primarily for their own consumption.

(8) **Open burning:** Means all forms of burning except those listed as exempt in WAC 173-425-020.

(9) **Permitting authority:** Means a local air authority (and the department where no local air authority exists) or their delegate. Conservation districts, counties, fire districts, or fire protection agencies may receive delegation for all or portions of the agricultural burning permit program as identified in a delegation agreement. The permitting authority will issue agricultural burning permits for a given locale.

(10) **Silvicultural burning:** Means burning on any land the department of natural resources protects per RCW 70.94.030(13), 70.94.660, 70.94.690, and pursuant to chapter 76.04 RCW.

[Statutory Authority: RCW 70.94.656. 98-12-016 (Order 97-45), § 173-430-030, filed 5/26/98, effective 6/26/98. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-030, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-030, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-030, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-030, filed 11/9/77. Formerly WAC 18-16-030.]

WAC 173-430-040 Agricultural burning requirements. (1) Agricultural burning is allowed when it is reasonably necessary to carry out the enterprise. A farmer can show it is reasonably necessary when it meets the criteria of the best management practices and no practical alternative is reasonably available.

(2) All agricultural burning requires a permit.

(a) To qualify for an agricultural burning permit the farmer must be an agricultural operation or government entity with specific agricultural burning needs, such as irrigation districts, drainage districts, and weed control boards.

(b) A farmer must fill out the information requested on a permit application (or the permit) and return it to the permitting authority.

(i) The permitting authority may require the farmer to fill out an application prior to issuing a permit.

(ii) The application must describe the reason for burning and include at least the following information: Name and address of the person or corporation responsible for the burn, the specific location (county; legal description: Range, section, township, block and unit number), the crop type, the type or size of the burn, directions to the burn, specific reason for the burn, the target date for burning, and any additional information required by the permitting authority. Each permitting authority may require additional information on the application.

(iii) All applications must comply with other state or local regulations.

(c) The permitting authority must evaluate the application, if there is one, and approve the permit prior to burning.

(d) Local air agencies (and the department where no local air agency exists) may issue permits for appropriate agricultural burning activities in nonattainment and urban growth areas.

(3) All agricultural burning permits require a fee. After January 1, 1995, the fee is the greater of:

(a) A minimum fee of twenty-five dollars per year per farm based on burning up to ten acres or equivalent which will be used as follows: Twelve dollars and fifty cents of which goes to the agricultural burning research fund and the remainder will be kept by the permitting authority to cover the costs of administering and enforcing this regulation; or

(b) A variable fee based on the acreage or equivalent of agricultural burning which will be used as follows: Up to one dollar per acre for applied research, twenty-five cents per acre for ecology administration and up to one dollar and twenty-five cents per acre for local permit program administration.

(i) Local permitting program administration. One portion of the fee shall cover the permitting authority's costs of administering and enforcing the program. The permitting authority may set the fee as an amount per farm per year, a set amount per fire, or a set rate no greater than one dollar and twenty-five cents per acre burned. The permitting authority must establish this portion of the fee by an appropriate, public

process such as a local rule, ordinance, or resolution. In areas of the state where the department is the permitting authority this portion of the fee shall be one dollar and twenty-five cents per acre burned.

(ii) Ecology administration. Another portion of the fee shall be twenty-five cents per acre burned and cover the statewide administrative, education, and oversight costs of the department. The amount (if any) by which the annual total, of this portion of the fee, exceeds the annual statewide administrative, education, and oversight costs shall be deposited in the agricultural burning research fund of the air pollution control account.

(iii) Research fund. A final portion, the agricultural burning applied research portion, of the fee shall be no greater than one dollar per acre burned. The amount assessed may be less than one dollar per acre burned as periodically determined by the Ag task force based on applied research needs, regional needs and the research fund budget. The research portion of the fee assessed shall be fifty cents per acre burned starting in calendar year 1995. The Ag task force may also establish discounted assessment rates based on the use of best management practices.

(c) A farmer must pay the fee prior to receiving a permit. Refunds are allowed for portions not burned provided the adjusted fee after subtracting refunds is no less than twenty-five dollars.

(d) The agricultural burning practices and research task force may set acreage equivalents, for nonfield style agricultural burning practices, based on the amount of emissions relative to typical field burning emissions. Any acreage equivalents, established by rule, shall be used in determining fees. For agricultural burning conducted by irrigation or drainage districts, each mile of ditch (including banks) burned is calculated on an equivalent acreage basis.

(4) All agricultural burning permits must be conditioned to minimize air pollution.

(a) A farmer must comply with the conditions on the agricultural burning permit.

(b) For purposes of protecting public health (not eliminating agricultural burning), if an area exceeds or threatens to exceed unhealthy air pollution levels, the permitting authority may limit the number of acres, on a pro rata basis, or as provided by RCW 70.94.656.

(c) Permits must be conditioned to minimize emissions insofar as practical, including denial of permission to burn during periods of adverse meteorological conditions. Additional requirements for burning of field and turf grasses grown for seed. The department of ecology will proceed with the process to certify alternatives to burning as identified in RCW 70.94.656(3). In addition to the certification process, ecology is also limiting the number of acres allowed to be burned as specified in RCW 70.94.656(4). Without regard to any previous burn permit history, in 1996, each farmer shall be limited to burning the greater of:

(i) Two-thirds of the number of acres the farmer burned under a valid permit issued in 1995; or

(ii) Two-thirds of the number of acres in grass seed production on May 1, 1996. "In production" means planted, growing and under the control of the farmer.

(d) Additional requirements for burning of field and turf grasses grown for seed. Beginning in 1997 and until approved alternatives become available, each farmer shall be limited to burning no more than one-third of the number of acres in grass seed production on May 1, 1996. "In production" means planted, growing and under the control of the farmer.

(e) Exemptions to additional requirements for burning of field and turf grasses grown for seed ((d) of this subsection). A farmer may request an exemption for extraordinary circumstances, such as property where a portion(s) of the field is oddly shaped or where the slope is extremely steep. This provision does not apply to WAC 173-430-045 Alternatives to burning field and/or turf grasses grown for seed. Under this subsection, relief from the acreage/emissions reduction requirements of (d) of this subsection shall be limited to no more than five percent of the acreage in production on May 1, 1996, and is also subject to the following provisions:

(i) The exemption request must be certified by an agronomic professional;

(ii) The farmer must be able to show full compliance with the emissions reductions in (d) of this subsection for the acreage not exempted; and

(iii) The farmer must be in full compliance with permit requirements for other crops under WAC 173-430-040.

(f) The department of ecology or local air authority may provide for trading of permits using the method described in (f)(i), (ii), (iii), (iv), (v), and (vi) of this subsection. This trading system uses a straight transfer of acres, a transfer requiring mandatory compensation, or a combination of both. If ecology or the local air authority finds that emissions resulting from trading are creating a health impact, as defined by ecology or the local air authority, the trading system, once created, may be dissolved. This provision does not apply to WAC 173-430-045 Alternatives to burning field and/or turf grasses grown for seed.

(i) Ecology or the local air authority may develop a system that allows the trading of permits by:

(A) Adding a signed transfer line to the written permit that provides for a signature for the current holder of the permit;

(B) Providing a tracking system that identifies the current holder of the permit, that identifies when the permit was last used to allow burning of acreage, and that allows the name of the holder to be changed if the transfer line is signed by the current holder;

(C) Requiring that the new holder of the permit must turn in the permit with the signed transfer line at least sixty days before the new holder plans to burn; and

(D) Assuring that the permits are used only once in a calendar year.

(ii) By signing the transfer line on the permit the permit holder must indicate that he or she understands that the acres transferred may no longer be burned, that a permit for the acres transferred will not be issued to the signing permit holder in future years, and that the acres being transferred were not already burned during the calendar year during which the transfer takes place.

(iii) Ecology and the local air authorities may add restrictions to the transfer of permits closer to areas with higher population densities.

(iv) Only permits for acreage which has not yet been burned may be transferred or traded. The seller of the permit is responsible for permanently reducing the acreage burned by the amount of acreage transferred from January 1 of the year during which the transaction takes place.

(v) Acreage that is exempted under (e) of this subsection is not eligible for the trading system.

(vi) The authorities are encouraged to work together to use the same system and to allow trading between authority jurisdictions so as to allow the grass seed growers to adjust to the two-thirds overall reduction in acres permitted for burning as easily as possible.

(g) Measurement for emission reduction for grass seed field and turf grass. Ecology will use acres as the basis for determining emission reductions as provided by RCW 70.94.656, until another method(s) is shown to be better and meets with the intent of RCW 70.94.656(4). Ecology will investigate alternate methods, as they become available. If ecology finds that an alternate method is appropriate and meets the criteria, it may certify this method using an administrative order.

(h) Alternate open burning practices for field and turf grass grown for seed. Ecology acknowledges that there may be practices that involve some burning, but which produce emissions quantifiably below those of open field burning. If ecology finds that a practice involves open burning and still substantially reduces emissions below open field burning, ecology may certify the alternate burning practice(s) by administrative order. Any certified practice may be used to satisfy the acreage/emissions reduction requirements of (d) of this subsection provided:

(i) The acreage application of the practice is adjusted to reflect effectiveness in reducing emissions so as to meet or exceed the emissions reduction required by (d) of this subsection; and

(ii) In no case shall the emission reduction requirement for the field and turf grass grown for seed be less than that required in (d) of this subsection.

(5) Other laws. A farmer must obtain any local permits, licenses, or other approvals required by any other laws, regulations, or ordinances. The farmer must also honor other agreements entered into with any federal, state, or local agency.

[Statutory Authority: RCW 70.94.656. 98-12-016 (Order 97-45), § 173-430-040, filed 5/26/98, effective 6/26/98. Statutory Authority: RCW 70.94.656(4). 97-03-021 (Order 96-05), § 173-430-040, filed 1/7/97, effective 2/7/97. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-040, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-040, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-040, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-040, filed 11/9/77. Formerly WAC 18-16-040.]

WAC 173-430-045 Alternatives to burning field and/or turf grasses grown for seed. (1) When is open burning of field and turf grasses grown for seed prohibited?

The Washington Clean Air Act prohibits open burning of field and turf grasses grown for seed whenever ecology has concluded, through a process spelled out in the act, that any procedure, program, technique, or device constitutes a practical alternate agricultural practice to open burning, and that alternate is reasonably available.

(2) Has ecology certified practical alternatives to open burning of field or turf grasses grown for seed?

Yes. Ecology concludes that mechanical residue management constitutes a practical alternate agricultural practice to the open burning of field and/or turf grasses grown for seed. Mechanical residue management means removing, including arranging for removal of, the residue using nonthermal, mechanical techniques including, but not limited to: Tilling, swathing, chopping, baling, flailing, mowing, raking, and other substantially similar nonthermal, mechanical techniques. Ecology further concludes that mechanical residue management is practical throughout all phases of seed production including:

(a) When the field is planted (establishment);

(b) When the field is producing seed (harvest years);

(c) When the field is prepared for replanting (tear-out).

(3) Are the alternatives to open burning that have been certified by ecology reasonably available?

Ecology concludes that mechanical residue management is reasonably available throughout the state wherever baling can be used. Baling is the process of gathering the residue and moving it off the field. Typically, a machine known as a "baler" is used to gather and bundle residue that is already cut.

Based on this conclusion, the open burning of field and/or turf grasses grown for seed is prohibited except as described in subsection (4) of this section. This rule does not require the use of any particular practice or technique. A farmer may use any alternate practice that does not involve field burning.

(4) Under what circumstances may open burning of field or turf grasses grown for seed be allowed?

(a) Where a farmer establishes that mechanical residue management is not reasonably available on specific portions of a field under specific production conditions due to slope. In a request for a waiver, a farmer must certify in writing to ecology or local air authority the following:

(i) Baling is not reasonably available due to slope. A farmer must explain why baling is not reasonably available, referring to specific facts supporting this belief. Unacceptable facts include, but are not limited to, general statements about burning as a tool for the routine control of weed and disease, for seed propagation purposes, or as a less costly alternative to mechanical residue management. A farmer may use statements from three separate businesses providing baling services as part of their commercial operation to support the belief that baling is not reasonably available due to slope. In the statements, the businesses must certify that they are independent from the farmer and have no financial interest in the farmer's operation;

(ii) Current harvest practices have not diminished the ability to use mechanical residue management;

(iii) Field production is after the first harvest season and prior to the fourth harvest season;

(iv) The ground or portions of the field have not been burned three years in a row in the three years preceding the request for a waiver;

(v) The ground or portions of the field will remain, without replanting, in grass production at least through the next harvest season following burning;

(vi) Residue from any neighboring fields or portions of fields under the control of the farmer will be removed prior to burning and reasonable precautions will be taken to prevent fire from spreading to areas where burning is not allowed; and

(vii) Adjustments in field rotations and locations cannot be made at any time during the rotational cycle and could not have been made when planted to allow the use of mechanical residue management techniques.

(b) Where a farmer establishes that extreme conditions exist. Ecology or a local air authority, at their discretion, may grant a request for a waiver for extreme conditions. The farmer must certify in writing the following:

(i) Why mechanical residue management is not reasonably available, referring to specific facts supporting this belief. Unacceptable facts include, but are not limited to, general statements about burning as a tool for the routine control of weed and disease, for seed propagation purposes, or as a less costly alternative to mechanical residue management;

(ii) He/she did not cause or create the condition to purposefully avoid using mechanical residue management techniques;

(iii) Field production is after the first harvest season and prior to the fourth harvest season;

(iv) The ground or portions of the field have not been burned three years in a row in the three years preceding the request for a waiver;

(v) The field will remain, without replanting, in grass production at least through the next harvest season following burning;

(vi) Residue from any neighboring fields or portions of fields under the control of the farmer will be removed prior to burning and that reasonable precautions will be taken to prevent fire from spreading to areas where burning is not allowed; and

(vii) Adjustments in field rotations and locations cannot be made at any time during the rotational cycle, and could not have been made when planted to allow the use of mechanical residue management techniques.

(c) Where a farmer demonstrates to ecology or local air authority that his/her small agricultural operation is eligible for mitigation.

For 1998 only, ecology or a local air authority may allow burning on a small agricultural operation. A small agricultural operation owner has a gross 1997 revenue from all agricultural operations of less than $300,000. A farmer must show information of sufficient quantity and quality to ecology or a local air authority to establish gross revenue from agricultural operations. A small farm owner may burn current acreage up to 25% of 1997 acreage burned under a valid permit. Fields taken out of production after the 1997 harvest season and in 1998 cannot be counted in the determination of 1997 acreage burned for the purpose of eligible burn acreage.

(d) Where a request for a waiver is approved under (a), (b), and (c) of this subsection, the following additional limitations also apply:

Total burn acreage must not exceed 1/3 of a farmer's acreage in production on May 1, 1996. Permits issued pursuant to (a), (b), or (c) of this subsection are not eligible for the permit trading program identified in WAC 173-430-040.

(5) What is the process for a farmer to request a waiver for circumstances described in subsection (4) of this section?

(a) A farmer submits a request for a waiver.

Sixty days prior to the planned burn date, a farmer must submit in writing a request to ecology or a local air authority. In the request, the farmer must identify the circumstances and meet the specific requirements of subsection (4)(a), (b), and/or (c) of this section. Ecology or the local air authority may require the request to be submitted on a form or in a format provided by ecology or the local air authority.

(b) Ecology or local air authority evaluates the request for a waiver.

Upon receiving a request for a waiver, ecology or the local air authority will determine if the necessary documents and information provided is complete enough to evaluate the request. If incomplete, ecology or local air authority will advise the farmer and suspend further evaluation until the request for a waiver is complete. The documents and information identified as necessary to complete the request must be delivered to ecology or the local air authority at least thirty days prior to burning. Once a request for a waiver is deemed complete, ecology or the local air authority will evaluate the request and decide whether the burning waiver is appropriate. As part of the evaluation, ecology or the local air may conduct an on-site inspection.

If ecology or local air authority denies a request for a waiver, the reasons will be provided to the farmer in writing. If approved, ecology or the local air authority will notify the farmer by convenient means. Ecology will also notify the appropriate delegated authority.

(c) The farmer applies for an agricultural burning permit.

If ecology or local air authority approves a request for a waiver, the farmer must complete a permit application and pay the fee as described in WAC 173-430-040. A delegated authority must receive written authorization from ecology that a waiver has been approved prior to processing a permit application.

[Statutory Authority: RCW 70.94.656. 98-12-016 (Order 97-45), § 173-430-045, filed 5/26/98, effective 6/26/98.]

WAC 173-430-050 Best management practices. (1) The Ag task force must identify best management practices for agricultural burning that are economically feasible and socially acceptable. Practical alterative production methods and controls which would reduce or eliminate agricultural burning must be used when reasonably available.

(2) The Ag task force may establish an agricultural burning general best management practice and crop-specific best management practices as appropriate. The Ag task force will work in conjunction with conservation districts and extension agents or other local entities in developing best management practices. The Ag task force may review and approve crop-

specific best management practices which have been developed or recommended by an individual or group.

(3) Approved best management practices information will be available from permitting authorities. The Ag task force, as it deems necessary, will hold public workshops on best management practices that have changed or are new and will periodically review the best management practices starting three years after approval.

(4) The Ag task force will clarify best management practices and make interpretative decisions as needed, considering all authoritative sources on the subject.

(a) An individual or group may request a best management practice clarification from the task force.

(b) The chair of the Ag task force may direct the questioned practice to a subgroup of task force members, provided that agricultural, research, and regulatory interests are included and all task force members are notified, or may direct it to the whole Ag task force.

(5) The Ag task force will modify best management practices as necessary to incorporate the latest research.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-050, filed 1/17/95, effective 2/17/95. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-050, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-050, filed 11/9/77. Formerly WAC 18-16-050.]

WAC 173-430-060 Research into alternatives to agricultural burning. (1) The department shall administer the research portion of the permit fee to carry out the recommendations of the Ag task force. In carrying out the recommendations, the department may conduct, cause to be conducted, or approve of a study or studies to explore and test economical and practical alternative practices to agricultural burning. To conduct any such study, the department may contract with public or private entities. Any approved study shall provide for the identification of such alternatives as soon as possible.

(2) The Ag task force will annually review research needs and submitted proposals and make its recommendations to the department.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-060, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-060, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-060, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-060, filed 11/9/77. Formerly WAC 18-16-060.]

WAC 173-430-070 General agricultural burning permit conditions and criteria. Permit decisions including the issuance, denial, or conditioning must be based on consideration of air quality conditions in the area affected by the proposed burning, the time of year, meteorological conditions, the size and duration of the proposed burning activity, the type and amount of vegetative material to be burned, the applicant's need to carry out such burning, existence of extreme burning conditions, risk of escape onto property owned by another, and the public's interest in the environment.

(1) Permits must include the following conditions:

(a) No burning at night except as a best management practice;

(b) Complying with all fire safety regulations of the local fire protection agency including any no-burn directives they may issue;

(c) Calling the local air authority burning information line (if there is one) before lighting the fire;

(d) Burning when wind takes the smoke away from roads, homes, population centers, or other public areas, to the greatest extent possible;

(e) No burning when adverse meteorological conditions;

(f) Burning only natural vegetation;

(g) No burning or adding fuel during any stage of an air pollution episode or local air quality burning ban;

(h) Attending the fire at all times.

(2) If the permitting authority determines a specific situation will cause a nuisance under chapter 173-400 WAC or RCW 70.94.640, agricultural burning will not be allowed.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-070, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-070, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-070, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-070, filed 11/9/77. Formerly WAC 18-16-070.]

WAC 173-430-080 Responsibilities of a permitting authority. The permitting authority must establish and administer an agricultural burning permit system. The minimum responsibilities are described in this section.

(1) The permitting authority must act on a complete application (as determined by the agency) within seven days of receipt.

(a) The permitting authority must evaluate the application and approve or deny all or part of it.

(b) The permitting authority must evaluate the application to determine if the requested burning is within the general or crop-specific best management practices.

(c) If the application is denied, the reason must be stated.

(2) Permitting authorities must determine day-to-day burning restrictions near populated areas and arrange for dissemination of the results.

(3) The permitting authority or its delegate is responsible for responding to agricultural burning complaints.

(4) The permitting authority must collect the fee and determine the local administration portion of the fee.

(a) Permitting authorities must issue a permit fee refund when a farmer decides to burn fewer acres than identified in the permit on confirmation by the permitting authority.

(b) Permitting authorities must formally adopt the local administration portion of the fee through rule, regulation, ordinance, or resolution.

(5) The permitting authority must transfer the research and ecology administration portion of the fee to the department.

(a) Funds should be transferred twice a year or as designated in the delegation agreement.

(b) The department must deposit all agricultural burning permit fees in the air pollution control account. Permitting authorities may deduct the local administration portion before forwarding the remainder to the department. The portion of the fee designated for research shall be deposited in a special account in the air pollution control account.

(6) The permitting authority must coordinate compliance. Violations are subject to the remedies of chapter 70.94 RCW, Washington Clean Air Act.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-080, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-080, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-080, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-080, filed 11/9/77. Formerly WAC 18-16-080.]

WAC 173-430-090 Receiving delegation—Counties, conservation districts, and fire protection agencies. (1) The permitting authority is the local air authority (or the department where no local air authority exists), or their delegate. The permitting authority is responsible for administering the agricultural burning permit program. The agricultural burning permit program may be delegated to conservation districts, counties, or fire protection agencies.

(2) When a local air authority (or the department where no local air authority exists) finds that a county, fire protection agency or conservation district is capable of administering the permit program and desires to do so, it may delegate by administrative order the administration and/or enforcement authority of the program. Delegation criteria include:

(a) Demonstrating that the responsibilities listed under permitting authority responsibilities section can be fulfilled; and

(b) Employing, contracting with, or otherwise accessing someone educated and trained in agronomics.

(3) Delegation may be withdrawn if the department or the local air authority finds that the agricultural burning program is not effectively being administered and/or enforced. Before withdrawing delegation, the delegated agency shall be given a written statement of the deficiencies in the program and a compliance schedule to correct program deficiencies. If the delegated agency fails to correct the deficiencies according to the compliance schedule, then the department or the local air authority may withdraw delegation.

(4) Permitting authorities must work through agreement with counties (if the county is not the permitting authority) and cities to provide convenient methods for issuing permits and granting permission to burn.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-090, filed 1/17/95, effective 2/17/95.]

WAC 173-430-100 Severability. The provisions of this regulation are severable. If any provision is held invalid, the application of such provision to other circumstances and the remainder of the regulation will not be affected.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-100, filed 1/17/95, effective 2/17/95.]

Chapter 173-433 WAC
SOLID FUEL BURNING DEVICES

WAC

WAC 173-433-010 Purpose. This chapter, promulgated under chapters 43.21A and 70.94 RCW, establishes 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 areas 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. The definitions of terms contained in chapter 173-400 WAC are incorporated by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter, shall have the following meanings:

(1) "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.

(2) "Certified" means that a woodstove meets emission performance standards when tested by an accredited independent laboratory and labeled according to procedures specified by the EPA in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990.

(3) "Coal-only heater" means an enclosed, coal burning appliance capable of and intended for residential space heating, domestic water heating, or indoor cooking, which has all of the following characteristics:

(a) An opening for emptying ash which is located near the bottom or the side of the appliance;

(b) A system which admits air primarily up and through the fuel bed;

(c) A grate or other similar device for shaking or disturbing the fuel bed or power driven mechanical stoker; and

(d) The model is listed by a nationally recognized safety testing laboratory for use of coal only, except for coal ignition purposes.

(4) "EPA" means United States Environmental Protection Agency.

(5) "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 manufacturer'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.

(6) "Nonaffected pellet stove" means that a pellet stove has an air-to-fuel ratio equal to or greater than 35.0 when tested by an accredited laboratory in accordance with methods and procedures specified by the EPA in "40 CFR 60 Appendix A, REFERENCE METHOD 28A - MEASUREMENT OF AIR TO FUEL RATIO AND MINIMUM ACHIEVABLE BURN RATES FOR WOOD-FIRED APPLIANCES" as amended through July 1, 1990.

(7) "Retailer" means any person engaged in the sale of solid fuel burning devices directly to the public. A contractor who sells dwellings with solid fuel burning devices installed or a mail order outlet which sells solid fuel burning devices

directly to the public is considered to be a solid fuel burning device retailer.

(8) "Seasoned wood" means wood of any species that has been sufficiently dried so as to contain twenty percent or less moisture by weight.

(9) "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 any device burning any solid fuel except those prohibited by WAC 173-433-120. This also includes devices 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.

(10) "Treated wood" means wood of any species that has been chemically impregnated, painted, or similarly modified to prevent weathering and deterioration.

(11) "Woodstove" (same as "wood heater") means an enclosed solid fuel burning device capable of and intended for residential space heating and domestic water heating that meets the following criteria contained in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990:

(a) An air-to-fuel ratio in the combustion chamber averaging less than 35.0, as determined by EPA Reference Method 28A;

(b) A useable firebox volume of less than twenty cubic feet;

(c) A minimum burn rate less than 5 kg/hr as determined by EPA Reference Method 28;

(d) A maximum weight of 800 kg, excluding fixtures and devices that are normally sold separately, such as flue pipe, chimney, and masonry components not integral to the appliance.

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.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-030, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-030, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-030, filed 1/3/89; 88-01-056 (Order 87-44), § 173-433-030, filed 12/16/87.]

WAC 173-433-100 Emission performance standards. (1) Woodstoves. On or before January 1, 1995, 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 tested to determine its emission performance and heating efficiency and certified and labeled in accordance with procedures and criteria specified in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990. After January 1, 1995, woodstove sales shall comply with the requirements of subsection (3) of this section, Solid fuel burning devices.

(2) Fireplaces. After January 1, 1997, a person shall not advertise to sell, offer to sell, sell, bargain, exchange, or give away a factory built fireplace unless it meets the 1990 United States Environmental Protection Agency standards for woodstoves or equivalent standard that may be established by the state building code council by rule. Subsection (3) of this section shall not apply to fireplaces, including factory built fireplaces, and masonry fireplaces.

(3) Solid fuel burning devices. After January 1, 1995, a person shall not advertise to sell, offer to sell, sell, bargain, exchange, or give away a solid fuel burning device in Washington unless it has been certified and labeled in accordance with procedures and criteria specified in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990, and meets the following particulate air contaminant emission standards and the test methodology of the United States Environmental Protection Agency in effect on January 1, 1991, or an equivalent standard under any test methodology adopted by the United States Environmental Protection Agency subsequent to such date:

(a) Two and one-half grams per hour for catalytic woodstoves; and

(b) Four and one-half grams per hour for all other solid fuel burning devices.

(c) For purposes of this subsection, "equivalent" shall mean the emissions limits specified in this subsection multiplied by a statistically reliable conversion factor determined by ecology that relates the emission test results from the methodology established by the United States Environmental Protection Agency prior to May 15, 1991, to the test results from the methodology subsequently adopted by that agency.

[Statutory Authority: Chapter 70.94 RCW and 501-506 ESHB 1028, 1991. 93-04-105 (Order 91-55), § 173-433-100, filed 2/3/93, effective 3/6/93. Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-100, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-100, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-100, filed 1/3/89; 88-01-056 (Order 87-44), § 173-433-100, filed 12/16/87.]

WAC 173-433-110 Opacity standards. (1) 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.

(2) Statewide opacity standard. An authority shall not adopt or enforce an opacity level for solid fuel burning devices that is more stringent than the statewide standard.

(3) Test method and procedures. Methods and procedures specified by the EPA in "40 CFR 60 Appendix A reference method 9 - VISUAL DETERMINATION OF THE OPACITY OF EMISSIONS FROM STATIONARY SOURCES" as amended through July 1, 1990, shall be used to determine compliance with subsection (1) of this section.

(4) Enforcement. Smoke visible from a chimney, flue or exhaust duct in excess of the opacity standard shall constitute prima facie evidence of unlawful operation of an applicable solid fuel burning device. This presumption may be refuted by demonstration that the smoke was not caused by an applicable solid fuel burning device. The provisions of this requirement shall:

(a) Be enforceable on a complaint basis.

(b) Not apply during the starting of a new fire for a period not to exceed twenty minutes in any four-hour period.

(5) Education. Any person or retailer providing information on the operation of solid fuel burning devices, such as brochures, demonstrations, and public education programs, should include information that opacity levels of ten percent or less are attainable through proper operation.

[Statutory Authority: Chapter 70.94 RCW and 501-506 ESHB 1028, 1991. 93-04-105 (Order 91-55), § 173-433-110, filed 2/3/93, effective 3/6/93. Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-110, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-110, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056 (Order 87-44), § 173-433-110, filed 12/16/87.]

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 and plastic products;

(4) Rubber products;

(5) Animal carcasses;

(6) Asphaltic products;

(7) Waste petroleum products;

(8) Paints and chemicals; or

(9) Any substance which normally emits dense smoke or obnoxious odors other than paper to start the fire, properly seasoned fuel wood, or coal with sulfur content less than 1.0% by weight burned in a coal-only heater.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-120, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-120, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-120, filed 1/3/89; 88-01-056 (Order 87-44), § 173-433-120, filed 12/16/87.]

WAC 173-433-130 General emission standards. In addition to the general applicability of chapter 173-400 WAC to all emission sources;

(1) Emissions detrimental to persons or property. No person shall cause or permit the emission of any air contaminant from an identifiable solid fuel burning device, including any air contaminant whose emission is not otherwise prohibited by this chapter, if the air contaminant emission causes detriment to the health, safety, or welfare of a person, plant or animal, or causes damage to property or business.

(2) Odors. Any person who shall cause or allow the generation of any odor from any solid fuel burning device which may interfere with any other property owner's use or enjoyment of his property must use recognized good practice and procedures to reduce these odors to a reasonable minimum.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-130, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-130, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-130, filed 1/3/89.]

WAC 173-433-140 Impaired air quality criteria. Impaired air quality shall be determined by ecology or an authority in accordance with the following criteria:

(1) "First stage impaired air quality" - the first stage indicates the presence of:

(a) Particulate matter ten microns and smaller in diameter (PM_{10}) at or above an ambient level of seventy-five micrograms per cubic meter; or

(b) Carbon monoxide at or above an ambient level of eight parts of contaminant per million parts of air by volume (ppm).

(2) "Second stage impaired air quality" - the second stage indicates the presence of particulate matter ten microns and smaller in diameter (PM_{10}) at or above an ambient level of one hundred five micrograms per cubic meter.

(3) On or after July 1, 1995, if an authority has geographically limited the use of solid fuel burning devices as specified under WAC 173-433-150(6), a single stage of impaired air quality will apply within the geographical area defined by the authority. A single stage of impaired air quality indicates the presence of:

(a) Particulate matter ten microns and smaller in diameter (PM_{10}) at or above an ambient level of ninety micrograms per cubic meter; or

(b) Carbon monoxide at or above an ambient level of eight parts of contaminant ppm.

(4) Acceptable ambient air quality measurement methods.

(a) Particulate matter ten microns and smaller in diameter (PM_{10}).

(i) Procedures specified by the EPA in "40 CFR 50, APPENDIX J - REFERENCE METHOD FOR THE DETERMINATION OF PARTICULATE MATTER AS PM_{10} IN THE ATMOSPHERE" as amended through July 1, 1990, shall be used to gather reference ambient PM_{10} data on a twenty-four-hour average.

(ii) More timely ambient PM_{10} measurement methods may be utilized to evaluate air quality impairment if accepted and approved by ecology. Any alternative method for evaluating air quality impairment for the purpose of curtailing solid fuel burning device use must be done at the same location and in parallel to the reference method, and must be related to the reference method by a mathematical relationship with a correlation coefficient of no less than 0.85.

(b) Carbon monoxide (CO) must be measured on an eight-hour average in accordance with procedures specified by the EPA in "40 CFR 50, APPENDIX C - REFERENCE METHOD FOR THE DETERMINATION OF CARBON MONOXIDE IN THE ATMOSPHERE (NON-DISPURSIVE INFRARED PHOTOMETRY)" as amended through July 1, 1990.

(c) All monitors used to measure PM_{10} for evaluation of air quality impairment due to solid fuel burning device use must be sited in accordance with EPA siting criteria in or near affected residential areas.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-140, filed 3/20/91, effective 4/20/91.]

WAC 173-433-150 Curtailment. (1) Whenever ecology or an authority has declared the first stage of impaired air quality for a geographical area a person in a residence or commercial establishment within that geographical area with an adequate source of heat other than a solid fuel burning device shall not operate any solid fuel burning device, unless the solid fuel burning device is one of the following:

(a) A nonaffected pellet stove; or

(b) A woodstove certified and labeled by the EPA under "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990; or

(c) A woodstove meeting the "Oregon Department of Environmental Quality Phase 2" emissions standards contained in Subsections (2) and (3) of Section 340-21-115, and certified in accordance with "Oregon Administrative Rules, Chapter 340, Division 21 - Woodstove Certification" dated November 1984.

(2) Whenever ecology or an authority has declared the second stage of impaired air quality for a geographical area a person in a residence or commercial establishment within that geographical area with an adequate source of heat other than a solid fuel burning device shall not operate any solid fuel burning device.

(3) Whenever ecology has declared an air pollution episode at a level above forecast a person in a residence or commercial establishment within that geographical area with an adequate source of heat other than a solid fuel burning device shall not operate any solid fuel burning device.

(4) The following matrix graphically illustrates the applicability of different types of solid fuel burning devices to the provisions of subsections (1) through (3) of this section:

Burn Condition	Impaired Air Quality		Episode	
Type of Device	First Stage	Second Stage	Forecast	Alert, Warning, or Emergency
Pellet Stove (non-affected)	OK	NO	OK	NO
EPA Certified Woodstove	OK	NO	OK	NO
DEQ Phase 2 Woodstove	OK	NO	OK	NO
EPA Exempted Device	NO	NO	OK	NO
All Other Devices	NO	NO	OK	NO

NOTES: "OK" indicates that the device may be operated
"NO" indicates that the device may not be operated

(5) On or after July 1, 1995, an authority may prohibit use of solid fuel burning devices within specific geographical areas:

(a) The following factors shall be considered in the exercise of this limitation:

(i) The contribution of solid fuel devices that do not meet the standards set forth in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990, to nonattainment of national ambient air quality standards;

(ii) The population density of the applicable geographical area; and

(iii) The public health effects of the use of solid fuel devices which do not meet the standards set forth in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990.

(b) The following solid fuel devices are exempted from this limitation:

(i) Fireplaces;

(ii) Woodstoves certified and labeled by the EPA under "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990; or

(iii) Nonaffected pellet stoves.

(c) An authority shall allow an exemption from this subsection for low-income persons who reside in the geographical area affected by this subsection.

(6) On or after July 1, 1995, whenever an authority has declared impaired air quality in accordance with criteria contained in WAC 173-433-140(3) for a geographical area defined under subsection (5) of this section, a person in a residence or commercial establishment within that geographical area shall not operate any solid fuel burning device.

(7) A person responsible for an applicable solid fuel burning device already in operation at the time an episode is declared shall withhold new solid fuel for the duration of the episode. A person responsible for an applicable solid fuel burning device already in operation at the time impaired air quality is declared shall withhold new solid fuel for the duration of the impaired air quality. Smoke visible from a chimney, flue or exhaust duct after three hours has elapsed from the declaration of the episode or impaired air quality shall constitute prima facie evidence of unlawful operation of an applicable solid fuel burning device. This presumption may be refuted by demonstration that the smoke was not caused by a solid fuel burning device.

(8) Ecology, authorities, health departments, fire departments, or local police forces having jurisdiction in the area may enforce compliance with the above solid fuel burning device curtailment rules after three hours has elapsed from the declaration of the episode or impaired air quality.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-150, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-150, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056 (Order 87-44), § 173-433-150, filed 12/16/87.]

WAC 173-433-170 Retail sales fee. (1) A person selling a solid fuel burning device at retail shall collect a fee from the buyer, pursuant to RCW 70.94.483.

(2) The fee shall be:

(a) Set at a minimum of thirty dollars on January 1, 1992. Thereafter, ecology may annually adjust the fee to account for inflation as determined by the office of the state economic and revenue forecast council. Adjustments in the fee should be rounded down to the nearest dollar.

(b) Applicable to all new and used solid fuel burning devices.

(c) Procedures for masonry fireplaces. Generally, contractors will collect, pay, and report the fee to the department of revenue on the combined excise tax return for the tax reporting period during which the retail sales tax is billed to the customer for the construction of the masonry fireplace. (See WAC 458-20-170 for a detailed explanation.) Collection and payment of the fee by contractors shall be in accordance with the following:

(i) A masonry contractor or other subcontractor who builds a masonry fireplace. The retail sale occurs at the time the general or prime contractor or customer is billed for the work. The masonry contractor or other subcontractor must collect the fee and pay it to the department of revenue, unless the masonry contractor or other subcontractor has received a resale certificate from the general or prime contractor. The fee shall be reported on the combined excise tax return.

(ii) A general or prime contractor building a custom building. The retail sale occurs at the time the customer is billed for the construction. The fee is charged and reported with the first progress payment after the masonry fireplace has been substantially completed. If a general or prime contractor subcontracts the work on a custom building to a masonry or other contractor, the general or prime contractor may give the masonry or other subcontractor a resale certificate. The general or prime contractor is responsible to collect the fee and pay it to the department of revenue. The fee is reported on the combined excise tax return.

(iii) A general or prime contractor building a speculation building. The fee is required to be paid at the time the fireplace is complete. The fee must be reported to the department of revenue on a combined excise tax return and paid to the department of revenue. If the prime or general contractor subcontracts the building of the masonry fireplace to a masonry contractor or other subcontractor, the general or prime contractor may not give a resale certificate to the masonry or other subcontractor. The masonry or other subcontractor must collect and pay the fee to the department of revenue as provided in (c)(i) of this subsection.

(d) Procedures for all other solid fuel burning devices. Collected by the retailer at the time of sale and remitted to the department of revenue in conjunction with the retail sales tax under chapter 82.08 RCW.

(3) If the retailer or contractor fails to collect and remit the fee to the department of revenue as prescribed in chapter 82.08 RCW, the retailer or contractor shall be personally liable to the state for the amount of the fee, with subsequent actions taken in accordance with the collection provisions of chapter 82.32 RCW.

(4) Beginning July 1, 1990, and each calendar quarter thereafter, the funds collected under RCW 70.94.483 shall be used solely for the purposes of public education and enforcement of the solid fuel burning device program. The department shall distribute the funds from the woodstove education and enforcement account as follows:

(a) Sixty-six percent of the funds shall be distributed to those local air authorities with enforcement programs, based upon the fraction of the total state population residing in the counties within their respective jurisdictions. Population figures used to establish this fraction shall be determined by the office of financial management. Where an activated local air authority does not exist or does not implement an enforcement program, or elects not to receive the funds, ecology shall retain the funds that would otherwise be distributed under this subsection; and

(b) Thirty-four percent of the funds shall be distributed to ecology for the purposes of enforcement and educating the public about:

(i) The effects of solid fuel burning device emissions upon health and air quality; and

(ii) Methods of achieving better efficiency and emission performance from solid fuel burning devices.

[Statutory Authority: Chapter 70.94 RCW and 501-506 ESHB 1028, 1991. 93-04-105 (Order 91-55), § 173-433-170, filed 2/3/93, effective 3/6/93. Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-170, filed 3/20/91, effective 4/20/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-170, filed 1/3/89.]

WAC 173-433-200 Regulatory actions and penalties. A person in violation of this chapter may be subject to the provisions of WAC 173-400-230 Regulatory actions and WAC 173-400-240 Criminal penalties.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-200, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056 (Order 87-44), § 173-433-200, filed 12/16/87.]

Chapter 173-434 WAC
SOLID WASTE INCINERATOR FACILITIES

WAC

WAC 173-434-010 Purpose. This chapter, promulgated under chapter 70.94 RCW, establishes emissions standards, design requirements, and performance standards for solid waste incinerator facilities.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-010, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-010, filed 3/16/87.]

WAC 173-434-020 Applicability. The provisions of this chapter shall apply statewide to all solid waste or solid waste derived fuel incinerator facilities that:

(1) Are constructed after January 1, 1985, which are designed to burn twelve or more tons per day; or

(2) Was constructed prior to January 1, 1985, but begins to burn twelve or more tons per day after January 1, 1985.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-020, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-020, filed 3/16/87.]

WAC 173-434-030 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter, shall have the following meanings.

(1) "Incinerator 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(s), 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 septage from 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 Specification Number 1 in Title 40 Code of Federal Regulations, Part 60, Appendix B as promulgated prior to July 1, 1988.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-030, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-030, filed 3/16/87.]

WAC 173-434-050 New source review (NSR). The conditions of WAC 173-400-110 shall apply to each new source or emissions unit covered by this chapter.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-050, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-434-050, filed 1/3/89. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-050, filed 3/16/87.]

WAC 173-434-070 Prevention of significant deterioration (PSD). The conditions of WAC 173-400-141 shall apply to all new major sources and major modifications covered by this chapter.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-070, filed 9/17/90, effective 10/18/90.]

WAC 173-434-090 Operation and maintenance plan. As part of a condition of approval of the notice of construction, 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. This plan must be approved by ecology or the authority prior to initial startup or testing. Every twenty-four months thereafter, the owner or operator must obtain approval of a new or updated plan to continue operation. The plan may include operating parameters, maintenance procedures and operation personnel training requirements and procedures to assure that the source will comply with all applicable rules, resolutions, regulations, safety practices, and ordinances.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-090, filed 9/17/90, effective 10/18/90.]

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 173-400 WAC if applicable. All incinerator facilities that are required to file a notice of construction are required to use best available control technology (BACT) which is determined on a case-by-case basis at the time of approval of the notice of construction. For some incinerator facilities, this may 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 an incinerator facility, the more stringent regulation, control, or emission limit shall govern.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-100, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-100, filed 3/16/87.]

WAC 173-434-110 Standards of performance. Sources and emissions units to which this chapter is applicable, shall comply with any applicable provisions of WAC 173-400-115 "Standards of performance for new sources."

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-110, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-110, filed 3/16/87.]

WAC 173-434-120 Emission standards for hazardous air pollutants. Sources and emissions units to which this chapter is applicable shall comply with any applicable provisions of WAC 173-400-075 "Emission standards for sources emitting hazardous air pollutants."

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-120, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-120, filed 3/16/87.]

WAC 173-434-130 Emission standards. In addition to the general applicability of chapters 173-400 and 173-490 WAC to all emission sources; no incinerator facility shall cause or permit air contaminant emissions in excess of the limits listed below. Specific emission standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.

(1) Particulate.

(a) For incinerator facilities that are capable of burning two hundred fifty or more tons of solid waste per day, emissions from each 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, emissions from each 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 stack shall not exceed fifty ppm on a volumetric dry basis corrected to seven percent oxygen for an hourly average, except if the owner or operator demonstrates that uncontrolled emissions of hydrogen chloride are reduced by at least eighty percent and a procedure acceptable to ecology or the authority for monitoring is developed.

(3) Sulfur dioxide. The sulfur dioxide emissions from each stack shall not exceed fifty ppm on a volumetric dry basis 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 ecology or the authority for monitoring is developed. When more than fifty percent of the heat input is fossil fuel, ecology or the authority may establish a higher sulfur dioxide limit provided that limit meets BACT requirements.

(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 emissions unit except incinerator stacks for more than six consecutive minutes in any sixty minute period.

(5) Fugitive emissions. Each 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 hooding material transfer points.

(6) Source testing. To demonstrate compliance with this chapter, refer to WAC 173-400-105.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-130, filed 9/17/90, effective 10/18/90. 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 zone 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 nor below 871°C (1600°F) for any reading.

(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. If over fire air is not used, the combustion chamber shall maintain the minimum combustion temperature or greater for at least one second with all combustion gases. 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 oxygen measured on a wet basis.

(4) Combustion air. To minimize odor, 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 ecology or the authority.

(5) Combustion air distribution and control. The air distribution shall be fully controllable where pressurized air is introduced and the air flow shall be monitored and recorded.

(6) Particulate control device temperature. The inlet temperature of the primary particulate control device shall not exceed 177°C (350°F).

(7) Operation. At all times, the owner or operator shall, to the extent practicable, maintain and operate any incinerator facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. This may mean that if the emissions limits are being exceeded, no more waste should be fed into the incinerator until the problem is corrected. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to ecology or the authority which may include, but is not limited to, monitoring and recording results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-160, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-160, filed 3/16/87.]

WAC 173-434-170 Monitoring and reporting. The owners or operators of each incinerator facility shall conduct routine monitoring of emissions in accordance with a program that has been approved by ecology or the authority. The program must contain quality control and quality assurance procedures.

(1) Monitoring. The owners or operators shall install, operate, and maintain continuous monitors and recorders for the following:

(a) Opacity;

(b) Combustion zone temperature;

(c) Particulate control device temperature;

(d) Hydrogen chloride and/or sulfur dioxide;

(e) Oxygen;

(f) Carbon monoxide;

(g) Combustion air distribution.

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 July 1, 1989.

(2) Reporting. Results of the monitoring shall be reported within fifteen 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 and the 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(s) 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 determine acceptable operating parameters. Testing shall be at least annually for incinerator facilities capable of burning two hundred fifty tons or more of solid waste per day and biennially for other facilities.

(4) Other data. Each owner or operator shall furnish upon request by ecology or the authority, other data required to evaluate the incinerator's emissions or emissions control program.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-170, filed 9/17/90, effective 10/18/90. 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 ecology or the

authority not less than twenty-four hours in advance of its occurrence. For incinerator 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 ecology or the authority.

(2) For unplanned conditions, such as a breakdown or upset, the condition shall be reported to ecology or the authority as soon as possible, but no later than the end of the next business day.

If, upon reviewing the available information, ecology or the authority determines that continued operation of any emissions unit is likely to cause a significant risk to the public, it may order an immediate shutdown of the emissions unit.

Upon request ecology or the authority, the owner or operator of the source shall submit a full written report including known causes of any 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: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-190, filed 9/17/90, effective 10/18/90. 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 that complies with WAC 173-400-105. The inventory shall include but may not be limited to stack and fugitive emissions of particulate matter, PM-10, sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds, hydrogen chloride, and other contaminants.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-200, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-434-200, filed 1/3/89. 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. Ecology or the 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: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-210, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-210, filed 3/16/87.]

Chapter 173-435 WAC
EMERGENCY EPISODE PLAN
(Formerly chapter 18-08 WAC)

WAC

WAC 173-435-010 Purpose. These rules implement chapter 70.94 RCW, the Washington State Clean Air Act.

Air pollution episodes occur under meteorological conditions that reduce the effective volume of air into which air contaminants are introduced. When these conditions occur, there is a possible danger that normal operations at air contaminant sources will be detrimental to public health and safety. The avoidance of high contaminant concentrations reaching significant harm levels during an episode requires a plan which will provide for rapid short-term emission reduction. This chapter sets up such an episode avoidance plan.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-010, filed 1/3/89; Order DE 77-21, § 173-435-010, filed 10/31/77.]

WAC 173-435-015 Significant harm levels. Significant harm levels are reached when any one of the following pollutant concentrations are measured:

(1) Sulfur dioxide - 2,620 $\mu g/m^3$ (1.0 ppm), 24-hour average.

(2) PM-10 - 600 micrograms/cubic meter, 24-hour average.

(3) Carbon monoxide - 57.5 mg/m^3 (50 ppm), 8-hour average, 86.3 mg/m^3 (75 ppm) 4-hour average, 144 mg/m^3 (125 ppm) 1-hour average.

(4) Ozone - 1,200 $\mu g/m^3$ (0.6 ppm) - 2-hour average.

(5) Nitrogen dioxide - 3,750 $\mu g/m^3$ (2.0 ppm) 1-hour average, 938 $\mu g/m^3$ (0.5 ppm) 24-hour average.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-015, filed 1/3/89.]

WAC 173-435-020 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 as defined in chapter 173-403 WAC, and terms specific to the emergency episode plan as defined below.

(1) "Air quality control region" means an area designated as an air quality control region by the federal environmental protection agency.

(2) "Episode stage" means a prescribed level of air contaminants or meteorological conditions where certain control actions are required to prevent ambient pollutant concentrations from reaching levels which could cause significant harm to the health of persons.

(3) "Emergency action center" means the headquarters for all department actions during an episode stage.

(4) "Hour" means a 60 minute period, beginning and ending on a clock hour.

(5) "8 hours" means any consecutive 8 hours, starting at any clock hour.

(6) "Major source" means any source which is estimated to emit at an annual rate of twenty-five tons per year or more of SO_2, particulates, or carbon monoxide.

(7) "Source emission reduction plan (SERP)" means a plan developed for an individual air pollution source and approved by the director, which sets forth the actions to be

taken at that source upon the declaration of various stages of an episode.

(8) "24 hours" means any consecutive 24 hours, starting at any clock hour.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-020, filed 1/3/89; Order DE 77-21, § 173-435-020, filed 10/31/77.]

WAC 173-435-030 Episode stage criteria. The declaration of episode stages shall be in accordance with the following criteria:

(1) **Stage:** "First or forecast" - the forecast stage indicates the presence of meteorological conditions conducive to the accumulation of air contaminants. A forecast stage may be declared when an air stagnation advisory is issued by the national weather service or there is equivalent indication of stagnant atmospheric conditions and conditions are forecast to persist for 24 hours. Declaration of this stage will activate increased air quality surveillance.

(2) **Stage:** "Second or alert" - the alert stage is that concentration of pollutants at which control actions are to begin. An alert will be declared when any one of the following levels is reached:

(a) SO_2 - 800 μg/m³ (0.3 ppm), 24-hour average.

(b) PM-10 - 350 μg/m³, 24-hour average.

(c) CO - 17 mg/m³ (15 ppm), 8-hour average.

(d) Oxidant (O_3) - 400 μg/m³ (0.2 ppm) - 1-hour average.

(e) NO_2 - 1130 μg/m³ (0.6 ppm) 1-hour average, 282 μg/m³ (0.15 ppm) 24-hour average; and meteorological conditions are such that the pollutant concentrations can be expected to remain at or above the alert levels for 12 or more hours or can be expected to recur within 24 hours unless control actions are taken.

(3) **Stage:** "Third or warning" - the warning stage indicates that air quality is continuing to degrade and that additional control actions are necessary. A warning will be declared when any one of the following levels is reached:

(a) SO_2 - 1,600 μg/m³ (0.6 ppm), 24-hour average.

(b) PM-10 - 420 μg/m³, 24-hour average.

(c) CO - 34 mg/m³ (30 ppm), 8-hour average.

(d) Oxidant (O_3) - 800 μg/m³ (0.4 ppm), 1-hour average.

(e) NO_2 - 2,260 μg/m³ (1.2 ppm), 1-hour average; 565 μg/m³ (0.3 ppm), 24-hour average; and meteorological conditions are such that pollutant concentrations can be expected to remain at or above the warning levels for 12 or more hours or can be expected to recur within 24 hours unless control actions are taken.

(4) **Stage:** "Fourth or emergency" - the emergency stage indicates that air quality is continuing to degrade toward a level of significant harm to the health of persons and that the most stringent control actions are necessary. An emergency will be declared when any one of the following levels is reached at any monitoring site:

(a) SO_2 - 2,100 μg/m³ (0.8 ppm), 24-hour average.

(b) PM-10 - 500 μg/m³, 24-hour average.

(c) CO - 46 mg/m³ (40 ppm), 8-hour average.

(d) Oxidant (O_3) - 1,200 μg/m³, (0.6 ppm), 1-hour average.

(e) NO_2 - 3,000 μg/m³ (1.6 ppm), 1-hour average; 750 μg/m³ (0.4 ppm), 24-hour average; and meteorological conditions are such that this condition can be expected to remain at or above emergency levels for 12 or more hours, or can be expected to recur within 24 hours.

(5) **Stage:** "Termination" - once declared, any stage reached by applying these criteria will remain in effect until the criteria for that level are no longer met. At that time, the next lower stage will be declared. When conditions improve to where the criteria are no longer met for any episode stage, the episode will be terminated.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-030, filed 1/3/89; Order DE 77-21, § 173-435-030, filed 10/31/77.]

WAC 173-435-040 Source emission reduction plans. (1) Any person responsible for the operation of a major source, when requested in writing by the director, shall prepare, in consultation with the department, a source emission reduction plan (SERP). This SERP shall be consistent with good industrial practice and safe operating procedures for reducing the emissions of air contaminants into the ambient air during periods of air pollution alert, warning, and emergency.

(2) SERPs shall be in writing and shall show the source of air contamination, describe the manner in which the reduction of air contaminant emissions will be achieved during periods of air pollution alert, warning, and emergency, and give the amount of reduction for each stage.

(3) During periods of air pollution alert, warning, or emergency, SERPs shall be made available, on the premises of sources required under this section to have them, to any person authorized to enforce the provisions of this episode avoidance plan.

(4) SERPs shall be submitted to the director within 30 days after receipt of a request thereof.

(5) SERPs shall be reviewed and approved by the director. If, in the opinion of the director, and SERP does not, in whole or in part, provide for satisfactory emission reduction during an episode, the director may disapprove such SERP, give the reason for disapproval, and require the resubmittal of same within a specified time period.

If within the time period specified, the person responsible fails to submit a SERP satisfactory to the director, the director may revise the SERP to cause it to meet episode avoidance objectives. This revised plan will then be the SERP for the source to which it applies.

(6) SERPs may be amended after submission to the director of a revised SERP. This revised SERP will be processed in the same manner as the originally submitted SERP.

(7) An emission reduction plan for the purpose of reducing motor vehicle emissions during episode stages, will be developed or approved by the department. These plans may include actions to be taken by other governmental units, citizens, and businesses.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-040, filed 1/3/89; Order DE 77-21, § 173-435-040, filed 10/31/77.]

WAC 173-435-050 Action procedures. (1) Whenever applicable criteria are met, the director may declare and terminate the forecast, alert, and warning stages of an episode. This declaration shall constitute an order for action in accordance with applicable SERPs.

(2) No open fires shall be ignited during any stage of an episode. Any person responsible for an open fire already ignited shall extinguish that fire when informed that an episode has been declared. Open fires conducted under the auspices of the department of natural resources for the purpose of burning forest slash pursuant to RCW 70.94.660 through 70.94.700 are to be extinguished by withholding new fuel and allowing the fire to burn down.

(3) Whenever applicable criteria are met, the governor may declare and terminate the emergency stage of an episode. This declaration shall constitute an order for action in accordance with applicable SERPs.

(4) Adverse air quality need not be region-wide for any episode stage to be declared. Action procedures may be taken for any area affected or likely to be affected by episode conditions. The declaration of any episode stage shall specify the area to which it applies.

(5) The broadest publicity practicable shall be given to the declaration of any episode stage. Such declaration shall, as soon as possible, be directly communicated to all persons responsible for the carrying out of SERPs within the affected area.

(6) Regardless of whether any episode stages have previously been declared, whenever the governor finds that emissions are causing imminent danger to public health or safety, the governor may declare an air pollution emergency and order the persons responsible for the operation of sources causing the danger, to reduce or discontinue emissions consistent with good operating practice, safe operating procedures, and SERPs, if any.

(7) Whenever an episode stage is declared on the basis of contaminant levels of carbon monoxide, oxidant, or nitrogen dioxide, the director shall take such action as may be required to reduce emissions from motor vehicles. These actions may include, but are not limited to, the rerouting or detouring of traffic. Actions to be taken by cities and businesses will be established and implemented according to plans developed by them and approved by the department. These plans must meet criteria for emission reduction established by the department.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-050, filed 1/3/89; Order DE 77-21, § 173-435-050, filed 10/31/77.]

WAC 173-435-060 Enforcement. (1) Whenever any episode stage has been declared, the department shall establish an emergency action center, which shall be the headquarters for all department actions during the episode.

(2) The department shall develop an operations manual, which shall set forth a plan for the receipt, processing, and dissemination of information and data during an episode.

(3) Enforcement with respect to any episode shall be directed from the emergency action center by the director in consultation with the governor's office.

(4) Authorized personnel of the department, the department of social and health services, and the state police shall have the authority to enforce orders of the director or the governor, issued under this chapter, as directed from the emergency action center. In addition, authorized personnel of any local air pollution control agency or local police force shall have the authority to enforce such orders against sources within the area over which that agency or police force has jurisdiction, as directed from the emergency action center.

(5) To determine compliance with any SERP, those persons authorized to enforce orders, hereunder, shall have the authority to enter upon any private or public property, excepting nonmultiple unit private dwellings, housing two families or less. No person shall refuse entry or access to enforcement personnel who request entry and present appropriate credentials.

(6) Whenever it appears that action being taken in compliance with SERPs will not avert imminent danger to public health and safety, the governor may order the following additional measures:

(a) Stopping and prohibiting motor vehicle travel and traffic;

(b) Closing down or restricting the use of any business, commercial, industrial or other establishment or activity which contributes to the emission of contaminants to the air.

(7) Any declaration or order issued in accordance with WAC 173-435-050 shall be effective immediately and shall not be stayed, pending completion of review.

(8) Whenever any order has been issued hereunder, the attorney general, upon the request of the governor or authorized representative, or the director shall petition the superior court of the county in which a source is located for a temporary restraining order for the immediate reduction or discontinuance of emissions from that source.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-060, filed 1/3/89; Order DE 77-21, § 173-435-060, filed 10/31/77.]

WAC 173-435-070 Sampling sites, equipment, and methods. (1) Data from all stations shall be considered when determining episode conditions. The department shall specify PM-10 monitoring stations to be operated continuously during any episode stage for episode management purposes. Stations from which episode declarations are based must be located in such a manner that the area represented by that station and the sources contributing to the episode condition can reasonably be determined and corrective actions taken.

(2) Sampling and analysis will be done by federal reference or federal equivalent methods; except the department may approve other sampling and analysis methods for PM-10 if reasonable site specific equivalency with the federal reference method has been demonstrated. This equivalency must be reestablished biennially.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-070, filed 1/3/89; Order DE 77-21, § 173-435-070, filed 10/31/77.]

Chapter 173-450 WAC

ESTABLISHING REQUIREMENTS FOR THE RECEIPT OF FINANCIAL AID

(Formerly chapter 18-20 WAC)

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.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-010, filed 9/16/87.]

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 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 air 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 statewide 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 statewide 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 attaining 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 statewide 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 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 as would similarly be required for request for payment of state financial aid under WAC 173-450-070. 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), § 173-450-090, 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 173-460 WAC
CONTROLS FOR NEW SOURCES OF TOXIC AIR POLLUTANTS

WAC

WAC 173-460-010 Purpose. (1) Pursuant to chapter 70.94 RCW, Washington Clean Air Act, the purpose of this chapter is to establish the systematic control of new sources emitting toxic air pollutants (TAPs) in order to prevent air pollution, reduce emissions to the extent reasonably possible, and maintain such levels of air quality as will protect human health and safety. Toxic air pollutants include carcinogens and noncarcinogens listed in WAC 173-460-150 and 173-460-160.

(2) This chapter establishes three major requirements:

(a) Best available control technology for toxics;

(b) Toxic air pollutant emission quantification;

(c) Human health and safety protection demonstration.

(3) Policy. It is the policy of ecology to reduce, avoid, or eliminate toxic air pollutants prior to their generation whenever economically and technically practicable.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-010, filed 6/18/91, effective 9/18/91.]

WAC 173-460-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. In the event of a conflict between the definitions provided in chapter 173-400 WAC and the definitions provided in this section, the definitions in this section shall govern. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter shall have the following meanings. Note: For copies of the above mentioned rule and any other rule cited in this chapter, contact the Department of Ecology, Records Section, P.O. Box 47600, Olympia, WA 98504-7600.

(1) "Acceptable source impact analysis" means a procedure for demonstrating compliance with WAC 173-460-070 and 173-460-080, that compares maximum incremental ambient air impacts with applicable acceptable source impact levels (ASIL).

(2) "Acceptable source impact level (ASIL)" means a concentration of a toxic air pollutant in the outdoor atmosphere in any area which does not have restricted or controlled public access that is used to evaluate the air quality impacts of a single source. There are three types of acceptable source impact levels: Risk-based, threshold-based, and special. Concentrations for these three types of ASILs are determined as provided in WAC 173-460-110. ASILs are listed in WAC 173-460-150 and 173-460-160.

(3) "Authority" means an air pollution control authority activated pursuant to chapter 70.94 RCW that has jurisdiction over the subject source. Ecology is the authority if an air pollution control authority has not been activated or if ecology has jurisdiction over the source pursuant to RCW 70.94.395.

(4) "Best available control technology for toxics (T-BACT)" applies to each toxic air pollutant (TAP) discharged or mixture of TAPs, taking in account the potency quantity and toxicity of each toxic air pollutant or mixture of TAPs

discharged in addition to the meaning given in WAC 173-400-030(10).

(5) "Carcinogenic potency factor" means the upper 95th percentile confidence limit of the slope of the dose-response curve and is expressed in units of (mg/kg-day)-1.

(6) "Class A toxic air pollutant (Class A TAP)" means a substance or group of substances listed in WAC 173-460-150.

(7) "Class B toxic air pollutant (Class B TAP)" means any substance that is not a simple asphyxiant or nuisance particulate and that is listed in WAC 173-460-160.

(8) "EPA's Dispersion Modeling Guidelines" means the United States Environmental Protection Agency Guideline on Air Quality Models, EPA (Revised) 40 CFR Part 51 Appendix W, and is hereby incorporated by reference.

(9) "EPA's Risk Assessment Guidelines" means the United States Environmental Protection Agency's Guidelines for Carcinogenic Risk Assessment, 51 FR 33992 (September 24, 1986) and is hereby incorporated by reference.

(10) "Increased cancer risk of one in one hundred thousand" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one hundred thousand individuals continuously exposed to a Class A toxic air pollutant at a given average dose for a specified time.

(11) "Increased cancer risk of one in one million" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one million individuals continually exposed to a Class A toxic air pollutant at a given average dose for a specified time.

(12) "Inhalation Reference Concentration (Inhalation RfC)" means a reference concentration published in the United States Environmental Protection Agency Integrated Risk Information System (IRIS).

(13) "Mixture" means a combination of two or more substances mixed in arbitrary proportions.

(14) "Modification" means any physical change in, or change in the method of operation of, a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted. The term modification shall be construed consistent with the definition of modification in Section 7411, Title 42, United States Code, and with rules implementing that section. For purposes of this chapter, the term "air contaminant" shall mean "toxic air contaminant" or "toxic air pollutant" as defined in subsection (20) of this section.

(15) "New toxic air pollutant source" means:

(a) The construction or modification of a stationary source that increases the amount of any toxic air pollutant emitted by such source or that results in the emission of any toxic air pollutant not previously emitted; and

(b) Any other project that constitutes a new source under section 112 of the Federal Clean Air Act.

(16) "Second Tier Analysis" means an optional procedure used after T-BACT and acceptable source impact analysis for demonstrating compliance with WAC 173-460-070. The second tier analysis uses a health impact assessment as provided in WAC 173-460-090, instead of an acceptable source impact level.

(17) "Simple asphyxiant" means a physiologically inert gas or vapor that acts primarily by diluting atmospheric oxygen below the level required to maintain proper levels of oxygen in the blood. Examples of simple asphyxiants are given in Appendix X of the TLV Booklet referred to in subsection (19) of this section and incorporated by reference.

(18) "Threshold limit value-time weighted average (TLV-TWA)" means a concentration limit recommended by the American Conference of Governmental Industrial Hygienists (ACGIH) for a normal eight-hour workday and forty-hour workweek.

(19) "TLV Booklet" means "TLVs, Threshold Limit Values and Biological Exposure Indices for 1991-92," published by the American Conference of Governmental Industrial Hygienists and is hereby incorporated by reference.

(20) "Toxic air pollutant (TAP)" or "toxic air contaminant" means any Class A or Class B toxic air pollutant listed in WAC 173-460-150 and 173-460-160. The term toxic air pollutant may include particulate matter and volatile organic compounds if an individual substance or a group of substances within either of these classes is listed in WAC 173-460-150 and/or 173-460-160. The term toxic air pollutant does not include particulate matter and volatile organic compounds as generic classes of compounds.

(21) "Upper bound unit risk factor" means the 95 percent upper confidence limit of an estimate of the extra risk of cancer associated with a continuous 70 year exposure to 1 ug/m3 of a Class A toxic air pollutant.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-020, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-020, filed 6/18/91, effective 9/18/91.]

WAC 173-460-030 Requirements, applicability and exemptions. (1) Applicability.

(a) The provisions of this chapter shall apply statewide. The authority shall enforce WAC 173-460-010, 173-460-020, 173-460-030, 173-460-040, 173-460-050, 173-460-060, 173-460-070, 173-460-080, 173-460-130, 173-460-140, 173-460-150, and 173-460-160.

(b) Except as provided in this chapter, any new toxic air pollutant source listed in (b)(i), (ii), or (iii) of this subsection that may emit a Class A or Class B TAP into the ambient air is subject to these regulations:

(i) Standard industrial classifications:

(A) Major group 10-Metal mining.

(B) Major group 12-Bituminous coal and lignite mining.

(C) Major group 13-Oil and gas extraction.

(D) Manufacturing industries major groups 20-39.

(E) Major group 49-Electric, gas, and sanitary services except 4971 irrigation systems.

(F) Dry cleaning plants, 7216.

(G) General medical surgical hospitals, 8062.

(H) Specialty hospitals, 8069.

(I) National security, 9711.

(ii) Any source or source category listed in WAC 173-400-100, 173-400-115(2), or 173-490-030(1) except WAC 173-490-030 (1)(e) gasoline dispensing facilities.

(iii) Any of the following sources:

(A) Landfills.

(B) Sites subject to chapter 173-340 WAC Model Toxics Control Act—Cleanup regulation.

(2) Exempt sources.

(a) Containers such as tanks, barrels, drums, cans, and buckets are exempt from the requirements of this chapter unless equipped with a vent other than those required solely as safety pressure release devices.

(b) Nonprocess fugitive emissions of toxic air pollutants from stationary sources, such as construction sites, unpaved roads, coal piles, waste piles, and fuel and ash handling operations are exempt from WAC 173-460-060.

(c) The following sources are generally exempt from the requirements of WAC 173-460-050, 173-460-070, 173-460-080, and 173-460-090. However, the authority may on a case-by-case basis, require compliance with these sections if the authority determines that the amount of emissions, nature of pollutant, or source location indicate that the ambient impact should be evaluated.

(i) Perchloroethylene dry cleaners

(ii) Petroleum solvent dry cleaning systems

(iii) Solvent metal cleaners

(iv) Chromic acid plating and anodizing

(v) Abrasive blasting

(d) Demolition and renovation projects involving asbestos removal and disposal are exempt from the requirements of this chapter.

(e) Process vents subject to 40 C.F.R. Parts 264 and 265, Subpart AA are exempt from the requirements of this chapter.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-030, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-030, filed 6/18/91, effective 9/18/91.]

WAC 173-460-040 New source review. (1) Applicability. This chapter supplements the new source review requirements of WAC 173-400-110 by adding additional new source review requirements for toxic air pollutant sources. If a notice of construction is required under both chapter 173-400 WAC and this chapter, the written applications shall be combined. A notice of construction is a written application to permit construction of a new source.

(a) The owner or operator of a new toxic air pollutant source listed in WAC 173-460-030(1) shall notify the authority prior to the construction, installation, or establishment of a new toxic air pollutant source and shall file a notice of construction application with the authority for the proposed emission unit(s). Notification and notice of construction are not required if the source is an exempt source listed in WAC 173-460-030(2) or subsection (2) of this section.

(b) The notice of construction and new source review applies only to the affected emission unit(s) and the contaminants emitted from the emission unit(s).

(c) New source review of a modification shall be limited to the emission unit or units proposed to be modified and the toxic air contaminants whose emissions would increase as a result of the modification.

(2) The owner or operator of a new toxic air pollutant source listed in WAC 173-460-030(1) is not required to notify or file a notice of construction with the authority if any of the following conditions are met:

(a) Routine maintenance or repair requires equivalent replacement of air pollution control equipment; or

(b) The new source is a minor process change that does not increase capacity and total toxic air pollutant emissions do not exceed the emission rates specified in small quantity emission rate tables in WAC 173-460-080; or

(c) The new source is the result of minor changes in raw material composition and the total toxic air pollutant emissions do not exceed the emission rates specified in the small quantity emission rate tables in WAC 173-460-080.

(3) Additional information. Within thirty days of receipt of a notice of construction, the authority may require the submission of additional plans, specifications, and other information necessary for the review of the proposed new or modified source.

(4) Requirements for new toxic air pollutant sources. The authority shall review notice(s) of construction, plans, specifications, and other associated information to determine that:

(a) The source will be in accord with applicable federal, state, and authority air pollution control rules and regulations;

(b) The source will use T-BACT for emissions control for the toxic air pollutants which are likely to increase; and

(c) Sources required to use T-BACT for emission control demonstrate compliance with WAC 173-460-070 by using the procedures established in WAC 173-460-080 or, failing that, demonstrates compliance, by using the additional procedures in WAC 173-460-090 and/or 173-460-100.

(5) Preliminary determination. Within thirty days after receipt of all information required, the authority shall:

(a) Make preliminary determinations on the matters set forth in this section; and

(b) Initiate compliance with the provisions of WAC 173-400-171 relating to public notice and public comment, as applicable.

(6) Final determination. If, after review of all information received including public comment, the authority finds that all the conditions in this section are satisfied, the authority shall issue a regulatory order to approve the notice of construction for the proposed new source or modification. If the authority finds that the conditions in this section are not satisfied, the authority shall issue an order for the prevention of construction, installation, or establishment of the toxic air pollution source(s). Where ecology has jurisdiction, it will endeavor to make final determinations as promptly as possible.

(7) Appeal of decision. A final notice of construction decision may be appealed to the pollution control hearings board pursuant to chapter 43.21B RCW.

(8) Commencement of construction. The owner(s) or operator(s) of the new source shall not commence construction until the applicable notice of construction has been approved.

(9) Operation and maintenance plan. As a condition of notice of construction approval, prior to start up, the authority may require a plan for the operation and maintenance of all equipment and procedures to assure continuous compliance with this chapter.

(a) A copy of the plan shall be filed with the authority upon request.

(b) The plan shall reflect good industrial practice and may include operating parameters and maintenance procedures, and shall be updated to reflect any changes in good industrial practice.

(c) Submittal of all plans should coincide with the authorities reporting requirements where applicable.

(10) Jurisdiction. Emission of toxic air pollutants that exceed the acceptable source impact levels listed in WAC 173-460-150 and 173-460-160 requires ecology and, if applicable, authority approval as specified in WAC 173-460-090 and 173-460-100.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-040, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-040, filed 6/18/91, effective 9/18/91.]

WAC 173-460-050 Requirement to quantify emissions. (1) New sources.

(a) When applying for a notice of construction, an owner or operator of a new toxic air pollution source shall quantify those emissions of each TAP or combination of TAPs that:

(i) Will be used for the modeling procedures in WAC 173-460-080; and

(ii) That may be discharged after applying required control technology. The information shall be submitted to the authority.

(b) Emissions shall be quantified in sufficient detail to determine whether the source complies with the requirements of this chapter.

(2) Small quantity sources.

Sources that choose to use small quantity emission rate tables instead of using dispersion modeling shall quantify emissions as required under WAC 173-460-080, in sufficient detail to demonstrate to the satisfaction of the authority that the emissions are less than the applicable emission rates listed in WAC 173-460-080.

(3) Level of detail.

An acceptable source impact level analysis under WAC 173-460-080, may be based on a conservative estimate of emissions that represents good engineering judgment. If compliance with WAC 173-460-070 and 173-460-080 cannot be demonstrated, more precise emission estimates shall be used to demonstrate compliance with WAC 173-460-090.

(4) Mixtures of toxic air pollutants.

(a) An owner or operator of a source that may discharge more than one toxic air pollutant may demonstrate compliance with WAC 173-460-070 and 173-460-080 by:

(i) Quantifying emissions and performing modeling for each TAP individually; or

(ii) Calculating the sum of all TAP emissions and performing modeling for the total TAP emissions and comparing maximum ambient levels to the smallest ASIL; or

(iii) Equivalent procedures may be used if approved by ecology.

(b) Dioxin and furan emissions shall be considered together as one TAP and expressed as an equivalent emission of 2,3,7,8 TCDD based on the relative potency of the isomers in accordance with United States Environmental Protection Agency (EPA) guidelines.

Note: Copies of EPA *"Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs). 1989 Update"* are available by requesting EPA /625/3-89/016, March 1989 from ORD Publications (513) 684-7562.

(c) Polyaromatic hydrocarbon (PAH) emissions. The owner or operator of a source that may emit a mixture of polyaromatic hydrocarbon emissions shall quantify the following PAHs and shall consider them together as one TAP equivalent in potency to benzo(a)pyrene: benzo(a) anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indenol(1,2,3-cd)pyrene, benzo(a)pyrene. The acceptable source impact analysis shall be conducted using the polyaromatic hydrocarbon emission ASIL contained in WAC 173-460-150(3).

(d) Uncontrolled roof vent emissions from primary aluminum smelters. The owner or operator of a primary aluminum smelter that may emit a mixture of polyaromatic hydrocarbons from uncontrolled roof vents shall quantify PAH emissions using either of the following methods:

(i) Quantify PAH emissions using the procedures in (c) of this subsection; or

(ii) Multiply the total particulate emission mass from the uncontrolled roof vents by the percent of the particulate that is extractable organic matter. The percent extractable organic matter shall be considered one percent of total particulate matter unless ecology determines that there is compelling scientific data which demonstrates that the use of this value is inappropriate. The acceptable source impact analysis shall be conducted using the primary aluminum smelter uncontrolled roof vent PAH emission ASIL contained in WAC 173-460-150(3). Note: For example, 100 grams of particulate air emission mass times one percent yields one gram of PAH emissions.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-050, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-050, filed 6/18/91, effective 9/18/91.]

WAC 173-460-060 Control technology requirements. Except as provided for in WAC 173-460-040, a person shall not establish, operate, or cause to be established or operated any new toxic air pollutant source which is likely to increase TAP emissions without installing and operating T-BACT. Satisfaction of the performance requirements listed below fulfill the T-BACT requirement for those particular sources. Local air pollution authorities may develop and require performance requirements in lieu of T-BACT provided that ecology approves the performance requirements as equivalent to T-BACT.

(1) Perchloroethylene dry cleaners. The requirements for perchloroethylene dry cleaners found in WAC 173-400-075 are considered T-BACT.

(2) Petroleum solvent dry cleaning systems. A petroleum solvent dry cleaning system shall include the following:

(a) All cleaned articles are dried in a solvent recovery dryer or the entire dryer exhaust is vented through a properly

functioning control device which will reduce emissions to no more than 3.5 kg of VOC per 100 kg dry weight of cleaned articles; and

(b) All cartridge filtration systems are drained in their sealed housing or other enclosed container before discarding the cartridges; and

(c) All leaking components shall be repaired immediately.

(3) Chromic acid plating and anodizing. The facility-wide uncontrolled hexavalent chromium emissions from plating or anodizing tanks shall be reduced by at least ninety-five percent using either of the following control techniques:

(a) An antimist additive or other equally effective control method approved by ecology or authority; or

(b) The tank is equipped with:

(i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and

(ii) An emission control system which limits hexavalent chromium emissions to no more than 0.15 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions shall be reduced by ninety-five percent.

(4) Chromic acid plating and anodizing (greater than 1 kilogram). If the facility-wide hexavalent chromium emissions from chromic acid plating and anodizing are greater than 1 kilogram per year after the application of control techniques required by subsection (3) of this section, the facility-wide hexavalent chromium emissions shall be reduced by at least ninety-nine percent using either of the following control techniques:

(a) An antimist additive or other equally effective control method approved by ecology or authority; or

(b) The tank is equipped with:

(i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and

(ii) An emissions control system which limits hexavalent chromium emissions to no more than 0.03 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions shall be reduced by ninety-nine percent.

(5) Solvent metal cleaners.

(a) Any solvent metal cleaner shall include all of the following equipment:

(i) A cover for the solvent tank which shall be closed at all times except when processing work in the degreaser. However, the cover shall be closed to the maximum extent possible when parts are being degreased;

(ii) A facility for draining cleaned parts such that the drained solvent is returned to the solvent tank;

(iii) For cold solvent cleaners, a freeboard ratio greater than or equal to 0.75;

(iv) Vapor degreasers shall have:

(A) A high vapor cutoff thermostat with manual reset; and

(B) For degreasers with spray devices, a vapor-up thermostat which will allow spray operation only after the vapor zone has risen to the design level; and

(C) Either a freeboard ratio greater than or equal to 1.00 or a refrigerated freeboard chiller; and

(v) Conveyorized vapor degreasers shall have:

(A) A drying tunnel or a rotating basket sufficient to prevent cleaned parts from carrying liquid solvent out of the degreaser; and

(B) A high vapor cutoff thermostat with manual reset; and

(C) A vapor-up thermostat which will allow conveyor movement only after the vapor zone has risen to the design vapor level.

(b) The operation of any solvent metal cleaner shall meet the following requirements:

(i) Solvent shall not leak from any portion of the degreasing equipment;

(ii) Solvent, including waste solvent, shall be stored in closed containers and shall be disposed of in such a manner as to prevent its evaporation into the atmosphere;

(iii) For cold cleaners, cleaned parts shall be drained until dripping ceases; and

(iv) Degreasers shall be constructed to allow liquid solvent from cleaned parts to drain into a trough or equivalent device and return to the solvent tank.

(c) For open-top vapor degreasers, solvent drag-out shall be minimized by the following measures:

(i) Racked parts shall be allowed to drain fully;

(ii) The work load shall be degreased in the vapor zone until condensation ceases;

(iii) Spraying operations shall be done within the vapor layer;

(iv) When using a powered hoist, the vertical speed of parts in and out of the vapor zone shall be less than three meters per minute (ten feet per minute);

(v) When the cover is open, the lip of the degreaser shall not be exposed to steady drafts greater than 15.3 meters per minute (fifty feet per minute); and

(vi) When equipped with a lip exhaust, the fan shall be turned off when the cover is closed.

(d) For conveyorized vapor degreasers, solvent drag-out shall be minimized by the following measures:

(i) Racked parts shall be allowed to drain fully; and

(ii) Vertical conveyor speed shall be maintained at less than three meters per minute (ten feet per minute).

(6) Abrasive blasting.

(a) Abrasive blasting shall be performed inside a booth or hangar designed to capture the blast grit or overspray.

(b) Outdoor blasting of structures or items too large to be reasonably handled indoors shall employ control measures such as curtailment during windy periods and enclosure of the area being blasted with tarps.

(c) Outdoor blasting shall be performed with either steel shot or an abrasive containing less than one percent (by mass) which would pass through a No. 200 sieve.

(d) All abrasive blasting with sand shall be performed inside a blasting booth or cabinet.

[Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-460-060, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.98 RCW. 98-04-062 (Order 97-38), § 173-460-060, filed 2/2/98, effective 3/5/98. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-060, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-060, filed 6/18/91, effective 9/18/91.]

WAC 173-460-070 Ambient impact requirement. When applying for a notice of construction under WAC 173-460-040, the owner or operator of a new toxic air pollutant source which is likely to increase TAP emissions shall demonstrate that emissions from the source are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. Compliance shall be demonstrated in any area which does not have restricted or controlled public access. The source shall demonstrate compliance by using procedures established in this chapter after complying with the control technology requirements in WAC 173-460-060.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-070, filed 6/18/91, effective 9/18/91.]

WAC 173-460-080 Demonstrating ambient impact compliance. (1) When applying for a notice of construction under WAC 173-460-040, the owner or operator of a new toxic air pollutant source which is likely to increase TAP emissions shall complete an acceptable source impact level analysis for Class A and Class B TAPs. The authority may complete this analysis.

(2) Acceptable source impact analysis.

(a) Carcinogenic effects. The owner or operator shall use dispersion modeling to estimate the maximum incremental ambient impact of each Class A TAP from the source and compare the estimated incremental ambient values to the Class A acceptable source impact levels in WAC 173-460-150. If applicable, the source may use the small quantity emission rate tables in (e) of this subsection.

(b) Other toxic effects. The owner or operator shall use dispersion modeling to estimate the maximum incremental ambient impact of each Class B TAP from the source and compare the estimated ambient values to the Class B acceptable source impact levels in WAC 173-460-160. If applicable, the source may use the small quantity emission rate tables in (e) of this subsection.

(c) Dispersion modeling. The owner or operator shall use dispersion modeling techniques in accordance with EPA guidelines. If concentrations predicted by dispersion screening models exceed applicable acceptable source impact levels, more refined modeling and/or emission estimation techniques shall be used. Refined modeling techniques shall be approved by ecology and the authority. (Note: EPA's Guideline on Air Quality Models, EPA 450/2-78-027R, can be obtained through NTIS (703) 487-4650 or can be downloaded from the OAQPS Technology Transfer Network electronic bulletin board system).

(d) Averaging times. The owner or operator shall use the averaging times in (d)(i), (ii), (iii) of this subsection unless alternate averaging times are approved by ecology. Ecology may allow the use of an alternate averaging time if it determines that the operating procedures of the source may cause a high concentration of a TAP for a short period and that consideration of potential health effects due to peak exposures may be warranted for the TAP.

(i) An annual average shall be used for Class A TAPs listed in WAC 173-460-150(2).

(ii) The averaging times specified in WAC 173-460-150(3) shall be used for Class A TAPs listed in WAC 173-460-150(3).

(iii) A twenty-four-hour averaging time shall be used for Class B TAPs listed in WAC 173-460-160.

(e) Small quantity emission rates. Instead of using dispersion modeling to show compliance with ambient impact demonstration requirements in WAC 173-460-080 and 173-460-090, a source may use the small quantity emission rate tables for all toxic air pollutants with acceptable source impact levels equal to or greater than 0.001 ug/m3. A source must first meet control technology and emission quantification requirements of WAC 173-460-050 and 173-460-060, then demonstrate that the source emission rate does not exceed the rates specified in the appropriate table below.

SMALL QUANTITY EMISSION RATES
CLASS A TOXIC AIR POLLUTANTS

Acceptable Source Impact Level (Annual ug/m3)	TAP Emissions Pounds per Year (10 meter stack and downwash)
0.001 to 0.0099	0.5
0.01 to 0.06	10
0.07 to 0.12	20
0.13 to 0.99	50
1.0 to 10	500

SMALL QUANTITY EMISSION RATES
CLASS B TOXIC AIR POLLUTANTS

Acceptable Source Impact Level (24 hour ug/m3)	TAP Emissions Pounds per Year	Pounds per Hour
Less than 1	175	0.02
1 to 9.9	175	0.02
10 to 29.9	1,750	0.20
30 to 59.9	5,250	0.60
60 to 99.9	10,500	1.20
100 to 129.9	17,500	2.0
130 to 250	22,750	2.6
Greater than 250	43,748	5.0

(3) Criteria for compliance. Compliance with WAC 173-460-070 is demonstrated if the authority determines that, on the basis of the acceptable source impact analysis, the source's maximum incremental ambient air impact levels do not exceed the Class A or Class B acceptable source impact levels in WAC 173-460-150 and 173-460-160; or, if applicable, the source TAP emission rates do not exceed the rates specified in subsection (2)(e) of this section.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-080, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-080, filed 6/18/91, effective 9/18/91.]

WAC 173-460-090 Second tier analysis. (1) Applicability.

(a) The owner or operator who cannot demonstrate class A or class B TAP source compliance with WAC 173-460-070 and 173-460-080 using an acceptable source impact level analysis as provided in WAC 173-460-080(2), may submit a petition requesting ecology perform a second tier analysis evaluation to determine a means of compliance with WAC 173-460-070 and 173-460-080 by establishing allowable emissions for the source. Petitions for second tier analysis evaluation shall be submitted to the local authority or ecology if ecology has jurisdiction over the source. Petitions received by local authorities shall be submitted to ecology within ten days of receipt. A second tier analysis evaluation may be requested when a source wishes to more accurately character-

ize risks, to justify risks greater than acceptable source impact levels, or to otherwise modify assumptions to more accurately represent risks. Risks may be more accurately characterized by utilizing updated EPA unit risk factors, inhalation reference concentrations, or other EPA recognized or approved methods. Ecology shall specify the maximum allowable emissions of any class A or class B TAP source based on ecology's second tier analysis evaluation.

(b) Ecology shall evaluate a source's second tier analysis only if:

(i) The authority has advised ecology that other conditions for processing the notice of construction have been met; and

(ii) Emission controls contained in the conditional notice of construction represent at least T-BACT; and

(iii) Ambient concentrations exceed acceptable source impact levels after using more refined emission quantification and air dispersion modeling techniques.

(c) Ecology shall determine whether the conditions in (b)(i), (ii), and (iii) of this subsection for a second tier analysis have been satisfied within ten working days of receipt of all information needed to make the determination. The matter shall be returned to the authority if ecology finds the conditions for a second tier analysis evaluation have not been met.

(2) Jurisdiction.

(a) Any second tier analysis application submitted by a source wishing to emit toxic air pollutants at levels greater than the acceptable source impact level contained in WAC 173-460-150 or 173-460-160 shall be approved or rejected by ecology.

(b) Any new emission limits approved by ecology as a result of the second tier analysis evaluation shall be enforced by the authority provided the authority approves the new emission limits.

(3) Approval criteria.

(a) Based on the second tier analysis, ecology may approve the emissions of TAPs from a source where ambient concentrations exceed acceptable source impact levels only if it determines that emission controls represent at least T-BACT and the source demonstrates that emissions of Class A TAPs are not likely to result in an increased cancer risk of more than one in one hundred thousand. The emission of Class A TAPs at levels likely to result in an increased cancer risk of more than one in one hundred thousand requires the approval of the director after complying with WAC 173-460-100.

(b) Ecology shall consider the second tier analysis and other information submitted by the applicant as well as department of health comments.

(i) Comments from other agencies and universities with appropriate expertise may also be considered in the decision to approve emissions that exceed acceptable source impact levels.

(ii) Public comments shall be considered if the source applies for a risk management decision under WAC 173-460-100.

(4) Contents of the second tier analysis.

(a) The second tier analysis consists of a health impact assessment. The applicant shall complete and submit a health impact assessment to ecology which includes the following information. Ecology may approve the submittal of less information if it determines that such information is sufficient to perform the second tier analysis evaluation. The health impact assessment shall be prepared in accordance with EPA's risk assessment guidelines as defined in WAC 173-460-020(9).

(i) Demographics such as population size, growth, and sensitive subgroups;

(ii) Toxicological profiles of all toxic air pollutants that exceed the ASIL;

(iii) Characterization of existing pathways and total daily intake for toxic air pollutants that exceed the ASIL;

(iv) Contribution of the proposed source toward total daily intake for toxic air pollutants that exceed the ASIL;

(v) Using existing data, characterization of risk from current exposure to the toxic air pollutants that exceed the ASIL. This includes existing TAP sources in the area, and anticipated risk from the new source;

(vi) Additive cancer risk for all Class A toxic air pollutants which may be emitted by the source;

(vii) Other information requested by ecology and pertinent to ecology's decision to approve the second tier application;

(viii) Uncertainty in the data; and

(ix) Length of exposure and persistence in the environment.

(b) The health assessment shall utilize current scientific information. New scientific information on the toxicological characteristics of toxic air pollutants may be used to justify modifications of upper bound unit risk factors used to calculate ASILs in WAC 173-460-150 and/or absorption rates of individual toxic air pollutants if ecology determines there is compelling scientific data which demonstrates that the use of EPA recognized or approved methods are inappropriate.

(5) Additional information.

(a) If approved by ecology, newly discovered scientific information which was unavailable at the time of the original submission of the health assessment may be used to justify modifications of the original health assessment. Ecology may approve the additional information if the source exercised due diligence at the time of original submission.

(b) Within thirty days after receipt of the second tier analysis and all supporting data and documentation, ecology may require the submission of additional information needed to evaluate the second tier analysis.

(6) Determination.

(a) If the second tier analysis is approved by ecology, ecology will return the petition to the authority and the authority may approve the notice of construction.

(b) The authority shall specify allowable emissions consistent with ecology's second tier analysis evaluation determination expressed in weight of pollutant per unit time for each emissions unit involved in the application. The notice of construction shall also include all requirements necessary to assure that conditions of this chapter and chapter 173-400 WAC are satisfied.

(7) Public notification requirements.

Ecology decisions regarding second tier analysis or decisions under WAC 173-460-100 shall comply with public notification requirements contained in WAC 173-400-171.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-090, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-090, filed 6/18/91, effective 9/18/91.]

WAC 173-460-100 Request for risk management decision. (1) Applicability. The owner or operator of a source that emits Class A TAPs that are likely to result in an increased cancer risk of more than one in one hundred thousand may request that ecology establish allowable emissions for the source.

(2) Contents of the application.

The applicant shall meet the submittal requirements of WAC 173-460-090(1) and submit all materials required under WAC 173-460-090 (4) and (5). The applicant may submit the request for a risk management decision concurrently with the second tier analysis application. Prior denial of the second tier analysis application under WAC 173-460-090(6) is not required.

(3) Criteria for approval. Ecology may approve the emissions of TAPs from a source where ambient concentrations are likely to result in an increased cancer risk of more than one in one hundred thousand only if the source first demonstrates the following:

(a) Proposed emission controls represent all known available and reasonable technology; and

(b) Application of all known available toxic air pollution prevention methods to reduce, avoid, or eliminate toxic air pollutants prior to their generation including recycling, chemical substitution, and efforts to redesign processes; and

(c) The proposed changes will result in a greater benefit to the environment as a whole.

(4) Additional methods to reduce toxic air pollutants. In addition to the requirements in subsection (3) of this section, the owner or operator may propose and ecology may consider measures that would reduce community exposure, especially exposure of that portion of the community subject to the greatest additional risk, to comparable toxic air pollutants provided that such measures are not already required.

(5) Public involvement. Ecology will initiate public notice and comment within thirty days of receipt of a completed risk management decision application. In addition to the public notice and comment requirements of WAC 173-400-171, the owner or operator shall hold a public hearing to:

(a) Present the results of the second tier analysis, the proposed emission controls, pollution prevention methods, additional proposed measures, and remaining risks; and

(b) Participate in discussions and answer questions.

(6) Time limitation. The owner or operator shall commence construction within eighteen months of the director's approval.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-100, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-100, filed 6/18/91, effective 9/18/91.]

WAC 173-460-110 Acceptable source impact levels. There are three types of acceptable source impact levels: Risk-based, threshold-based, and special acceptable source impact levels. They are computed as follows:

(1) Risk-based acceptable source impact levels for Class A TAPs. Risk-based acceptable source impact levels means the annual average concentration, in micrograms per cubic meter, that may cause an increased cancer risk of one in one million. Ecology shall calculate the risk-based acceptable source impact levels for Class A TAPs in WAC 173-460-150(2) using the following equation:

$$\text{Risk based ASIL (ug/m3)} = \frac{\text{RISK}}{\text{URF}}$$

*Where:

RISK = Cancer risk level (1 in 1,000,000)

URF = Upper bound unit risk factor as published in IRIS data base or other appropriate sources (ug/m3)-1.

(2) Threshold-based acceptable source impact levels for Class B TAPs. Threshold-based acceptable source impact levels in WAC 173-460-160 shall be determined as follows:

(a) If a Class B TAP has an Environmental Protection Agency Inhalation Reference Concentration, the inhalation reference concentration and specified averaging time shall be used.

(b) Other Class B TAP acceptable source impact levels shall be determined by dividing the TLV-TWA by three hundred to calculate a twenty-four hour TWA acceptable source impact level.

(3) Special acceptable source impact levels.

(a) Ecology may establish special acceptable source impact levels for TAPs for which upper bound risk factors or TLVs have not been established, or for mixtures of compounds if it determines that the above acceptable source impact level methods are not appropriate, do not adequately protect human health or are overly stringent.

(b) The averaging times for special ASILs are listed in WAC 173-460-150(3).

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-110, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-110, filed 6/18/91, effective 9/18/91.]

WAC 173-460-120 Scientific review and amendment of acceptable source impact levels and lists. (1) Ongoing scientific review.

(a) To use the best available scientific information, ecology shall conduct an ongoing review of information concerning whether to add or delete toxic air pollutants to WAC 173-460-150 or 173-460-160, what acceptable source impact levels should be used to review emissions of TAPs, source applicability and exemptions.

(b) A complete review shall be made at least once every three years at which time ecology shall consider scientific information developed by the E.P.A., Washington department of health, other states or other scientific organizations, scientific information provided by any person, and results of second tier analyses evaluations.

(2) Criteria for listing as Class A or Class B TAP.

(a) Ecology shall list a substance or group of substances as Class A or Class B TAPs if the department has reason to believe that the compound or group of compounds are likely to be emitted to the air from an air pollution source and the air emission of such compound or compounds could impact pub-

lic health. The compounds shall be removed from the list if ecology determines that these conditions no longer exist.

(b) Ecology may list mixtures of compounds as Class A and/or Class B TAPs if ecology determines that the health impact of the emission mixture is likely to be different from the known individual chemical impacts.

(3) Acceptable source impact level (ASIL).

Ecology may adopt an ASIL only if ecology determines that concentrations at that level will not unreasonably endanger human health.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-120, filed 6/18/91, effective 9/18/91.]

WAC 173-460-130 Fees. (1) Pursuant to RCW 70.94.152, ecology or the authority may charge a fee for the review of notices of construction.

(2) The fee imposed under this section may not exceed the cost of reviewing plans, specifications, and other information and administering such notice.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-130, filed 6/18/91, effective 9/18/91.]

WAC 173-460-140 Remedies. Violations of this chapter are subject to the penalty provisions and/or other remedies provided in chapter 70.94 RCW.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-140, filed 6/18/91, effective 9/18/91.]

WAC 173-460-150 Class A toxic air pollutants: Known, probable and potential human carcinogens and acceptable source impact levels.

(1) TABLE I
CLASS A TOXIC AIR POLLUTANTS
Known and Probable Carcinogens

CAS #	SUBSTANCE
75-07-0	Acetaldehyde
53-96-3	2-Acetylaminofluorene
79-06-1	Acrylamide
107-13-1	Acrylonitrile
309-00-2	Aldrin
—	Aluminum smelter polyaromatic hydrocarbon emissions
117-79-3	2-Aminoanthraquinone
97-56-3	o-Aminoazotoluene
92-67-1	4-Aminobiphenyl
61-82-5	Amitrole
62-53-3	Aniline
90-04-0	o-Anisidine
C7440-38-2	Arsenic and inorganic arsenic compounds
1332-21-4	Asbestos
2465-27-2	Auramine (technical grade)
71-43-2	Benzene
92-87-5	Benzidine and its salts
56-55-3	Benzo(a)anthracene
50-32-8	Benzo(a)pyrene
205-99-2	Benzo(b)fluoranthene
205-82-3	Benzo(j)fluoranthene
207-08-9	Benzo(k)fluoranthene
1694-09-3	Benzyl violet 4b
7440-41-7	Beryllium and compounds
111-44-4	Bis(2-chloroethyl)ether
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)
542-88-1	Bis(chloromethyl)ether
75-25-2	Bromoform
106-99-0	1,3-Butadiene
3068-88-0	B-Butyrolactone
7440-43-9	Cadmium and compounds
56-23-5	Carbon tetrachloride
57-74-9	Chlordane
510-15-6	Chlorobenzilate
67-66-3	Chloroform
107-30-2	Chloromethyl methyl ether (technical-grade)
108-43-0	Chlorophenols
126-99-8	Chloroprene
C7440-47-3	Chromium, hexavalent metal and compounds
—	Coke oven emissions
8001-58-9	Creosote
135-20-6	Cupferron
94-75-7	2,4-D and esters
3547-04-4	DDE (p,p'-Dichlorodiphenyldichloroethylene)
50-29-3	DDT (1,1,1 Trichloro-2,2-Bis(p-chlorophenyl)-ethane)
613-35-4	N,N-Diacetylbenzidine
101-80-4	4,4'-Diaminodiphenyl ether
226-36-8	Dibenz(a,h)acridine
53-70-3	Dibenz(a,h)anthracene
224-42-0	Dibenz(a,j)acridine
132-64-9	Dibenzofurans
189-64-0	Dibenzo(a,h)pyrene
191-30-0	Dibenzo(a,l)pyrene
189-55-9	1,2,7,8-Dibenzopyrene (dibenzo(a,i)pyrene)
192-65-4	Dibenzo(a,e)pyrene
764-41-0	1,4-Dichloro-2-butene
28434-86-8	3,3'-Dichloro-4,4'-diaminodiphenyl ether
106-46-7	1,4-Dichlorobenzene
91-94-1	3,3'-Dichlorobenzidine
107-06-2	1,2-Dichloroethane (ethylene chloride)
75-09-2	Dichloromethane (methylene chloride)
696-28-6	Dichlorophenylarsine (arsenic group)
78-87-5	1,2-Dichloropropane
60-57-1	Dieldrin
1615-80-1	1,2-Diethylhydrazine
101-90-6	Diglycidyl resorcinol ether
119-90-4	3,3'-Dimethoxybenzidine (ortol-dianisidine)
119-93-7	3,3-Dimethyl benzidine
77-78-1	Dimethyl sulfate
540-73-8	1,2-Dimethylhydrazine
123-91-1	1,4-Dioxane
—	Dioxins and furans
122-66-7	1,2-Diphenylhydrazine
106-89-8	Epichlorohydrin
106-93-4	Ethylene dibromide (dibromethane)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
50-00-0	Formaldehyde
67-45-8	Furazolidone
	Furium (nitrofuran group)
765-34-4	Glyciadaldehyde
76-44-8	Heptachlor
118-74-1	Hexachlorobenzene
319-84-6	Hexachlorocyclohexane (Lindane) Alpha BHC
319-85-7	Hexachlorocyclohexane (Lindane) Beta BHC
58-89-9	Hexachlorocyclohexane (Lindane) Gamma BHC
680-31-9	Hexamethylphosphoramide
302-01-2	Hydrazine
193-39-5	Indeno(1,2,3-cd)pyrene
—	Isopropyl oils
—	Lead compounds
301-04-2	Lead acetate
7446-27-7	Lead phosphate
129-15-7	2-Methyl-1-nitroanthraquinone
592-62-1	Methyl azoxymethyl acetate
3697-24-3	5-Methylchrysene
101-14-4	4,4'-Methylenebis(2-chloroaniline) (MBOCA)
838-88-0	4,4'-Methylenebis(2-methylaniline)
101-77-9	4,4-Methylene dianiline
13552-44-8	4,4-Methylenedianiline dihydrochloride
64091-91-4	4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone
2385-85-5	Mirex
139-91-3	5-(Morpholinomethyl)-3-amino)-2-oxazolidinone (furaltudone)

CAS #	SUBSTANCE
134-32-7	1-Napthylamine
C7440-02-0	Nickel and compounds (as nickel subsulfide or nickel refinery dust)
531-82-8	N-(4-(5-Nitro-2-furyl)-2-thiazolyl)acetamide
602-87-9	5-Nitroacenaphthene
1836-75-5	Nitrofen
	Nitrofurans
59-87-0	Nitrofurazone
555-84-9	1-(5-Nitrofurfurylidene)amino)-2-imidazolidinone
126-85-2	Nitrogen mustard N-oxide
302-70-5	Nitrogen mustard N-oxide hydrochloride
79-46-9	2-Nitropropane
924-16-3	N-Nitrosodi-n-butylamine
759-73-9	N-Nitroso-N-ethylurea (NEU)
615-53-2	N-Nitroso-N-methylurethane
621-64-1	N-Nitrosodi-n-propylamine
10595-95-6	N-Nitrosomethylethylamine
59-89-2	N-Nitrosomorpholine
86-30-6	N-Nitrosodiphenylamine
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine) (DEN)
62-75-9	N-Nitrosodimethylamine
2646-17-5	Oil orange SS
794-93-4	Panfuran S (dihydroxymethylfuratrizine)
87-86-5	Pentachlorophenol
127-18-4	Perchloroethylene (tetrachloroethylene)
63-92-3	Phenoxybenzamine hydrochloride
	N-Phenyl-2-napthylamine
—	Polyaromatic hydrocarbons (PAH)
1336-36-3	Polychlorinated biphenyls (PCBs)
3761-53-3	Ponceau MX
	P(p)(alpha, alpha, alpha)-Tetra-chlorotoluene
1120-71-4	1,3-Propane sultone
75-56-9	Propylene oxide
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)
139-65-1	4,4'-Thiodianiline
1314-20-1	Thorium dioxide
95-80-7	2,4-Toluene diamine
584-84-9	2,4-Toluene diisocyanate
95-53-4	o-Toluidine
636-21-5	o-Toluidine hydrochloride
8001-35-2	Toxaphene
55738-54-0	Trans-2((Dimethylamino)methylimino)-5-(2-(5-nitro-2-furyl) vinyl-1,3,4-oxadiazole
79-01-6	Trichloroethylene
88-06-2	2,4,6-Trichlorophenol
75-01-4	Vinyl chloride

(2) TABLE II
CLASS A TOXIC AIR POLLUTANTS
WITH ESTABLISHED
ACCEPTABLE SOURCE IMPACT LEVELS

CAS #	SUBSTANCE	10-6 RISK ASIL MICRO-GRAMS/M^3 ANNUAL AVERAGE
75-07-0	Acetaldehyde	0.4500000
79-06-1	Acrylamide	0.0007700
107-13-1	Acrylonitrile	0.0150000
309-00-2	Aldrin	0.0002000
62-53-3	Aniline	6.3000000
C7440-38-2	Arsenic and inorganic arsenic compounds	0.0002300
1332-21-4	Asbestos (Note: fibers/ml)	0.0000044
71-43-2	Benzene	0.1200000
92-87-5	Benzidine and its salts	0.0000150
50-32-8	Benzo(a)pyrene	0.0004800
7440-41-7	Beryllium and compounds	0.0004200
111-44-4	Bis(2-chloroethyl)ether	0.0030000
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	2.5000000
542-88-1	Bis(chloromethyl)ether	0.0000160
75-25-2	Bromoform	0.9100000
106-99-0	1,3-Butadiene	0.0036000
7440-43-9	Cadmium and compounds	0.0005600
56-23-5	Carbon tetrachloride	0.0670000
57-74-9	Chlordane	0.0027000
510-15-6	Chlorobenzilate	0.2000000
67-66-3	Chloroform	0.0430000
108-43-0	Chlorophenols	0.1800000
C7440-47-3	Chromium, hexavalent metal and compounds	0.0000830
—	Coke oven emissions	0.0016000
3547-04-4	DDE (p,p'-dichlorodiphenyldichloroethylene)	0.1000000
50-29-3	DDT (1,1,1 Trichloro-2,2-Bis-(p-chlorophenyl)-ethane)	0.0100000
764-41-0	1,4-Dichloro-2-butene	0.0003800
106-46-7	1,4-Dichlorobenzene	1.5000000
91-94-1	3,3'-Dichlorobenzidine	0.0770000
107-06-2	1,2-Dichloroethane (ethylene chloride)	0.0380000
75-09-2	Dichloromethane (methylene chloride)	0.5600000
60-57-1	Dieldrin	0.0002200
119-93-7	3,3-Dimethyl benzidine	0.0038000
123-91-1	1,4-Dioxane	0.0320000
122-66-7	1,2-Diphenylhydrazine	0.0045000
106-89-8	Epichlorohydrin	0.8300000
106-93-4	Ethylene dibromide (dibromethane)	0.0045000
75-21-8	Ethylene oxide	0.0100000
96-45-7	Ethylene thiourea	1.0000000
50-00-0	Formaldehyde	0.0770000
76-44-8	Heptachlor	0.0007700
118-74-1	Hexachlorobenzene	0.0022000
58-89-9	Hexachlorocyclohexane (Lindane) gamma BHC	0.0026000
302-01-2	Hydrazine	0.0002000
C7440-02-0	Nickel and compounds (as nickel subsulfide or nickel refinery dust)	0.0021000
924-16-3	N-Nitrosodi-n-butylamine	0.0006300
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine)(DEN)	0.0000230
62-75-9	N-Nitrosodimethylamine	0.0000710
79-46-9	2-Nitropropane	0.0003700
87-86-5	Pentachlorophenol	0.3300000
127-18-4	Perchloroethylene (tetrachloroethylene)	1.1000000
1336-36-3	Polychlorinated biphenyls (PCB)	0.0045000
75-56-9	Propylene oxide	0.2700000
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	0.00000003
95-80-7	2,4-Toluene diamine	0.0110000
95-53-4	o-Toluidine	0.1400000
636-21-5	o-Toluidine hydrochloride	0.1400000
8001-35-2	Toxaphene	0.0031000
79-01-6	Trichloroethylene	0.5900000
88-06-2	2,4,6-Trichlorophenol	0.3200000
75-01-4	Vinyl chloride	0.0120000

(3) TABLE III
CLASS A TOXIC AIR POLLUTANTS
WITH SPECIAL ACCEPTABLE SOURCE
IMPACT LEVELS

CAS #	SUBSTANCE	ASIL MICRO-GRAMS/M^3	AVERAGING TIME
—	Primary aluminum smelter uncontrolled roof vent polyaromatic hydrocarbon (PAH) emissions (Note: Quantify according to WAC 173-460-050 (4)(d))	0.0013	Annual
61-82-5	Amitrole	0.06	24 hour
90-04-0	o-Anisidine	1.7	24 hour
126-99-8	β-Chloroprene	120	24 hour
94-75-7	2,4-D and esters	33	24 hour

CAS #	SUBSTANCE	ASIL MICRO-GRAMS/M^3	AVERAGING TIME
78-87-5	1,2-Dichloropropane	4.0	24 hour
77-78-1	Dimethyl sulfate	1.7	24 hour
540-73-8	1,2-Dimethylhydrazine	4.0	24 hour
319-84-6	Hexachlorocyclohexane (Lindane) alpha BHC	1.7	24 hour
319-85-7	Hexachlorocyclohexane (Lindane) beta BHC	1.7	24 hour
—	Lead compounds	0.5	24 hour
101-14-4	4,4'-Methylenebis (2-Chloroaniline) (MBOCA)	0.7	24 hour
101-77-9	4,4-Methylene dianiline	2.7	24 hour
—	Polyaromatic hydrocarbon (PAH) emissions (Note: Quantify according to WAC 173-460-050 (4)(d))	0.00048	Annual
584-84-9	2,4-Toluene diisocyanate	0.12	24 hour

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-150, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-150, filed 6/18/91, effective 9/18/91.]

WAC 173-460-160 Class B toxic air pollutants and acceptable source impact levels. The following table lists Class B toxic air pollutants and acceptable source impact levels:

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
86-88-4	ANTU	1.0
60-35-5	Acetamide	—
64-19-7	Acetic acid	83
108-24-7	Acetic anhydride	67
67-64-1	Acetone	5900
75-05-8	Acetonitrile	220
98-86-2	Acetophenone	—
79-27-6	Acetylene tetrabromide	47
107-02-8	Acrolein	0.02
79-10-7	Acrylic acid	0.30
107-18-6	Allyl alcohol	17
107-05-1	Allyl chloride	1.0
106-92-3	Allyl glycidyl ether (AGE)	77
2179-59-1	Allyl propyl disulfide	40.0
C7429-90-5	Aluminum, Al alkyls	6.7
7429-90-5	Aluminum, as AL metal dust	33
C7429-90-5	Aluminum, as AL pyro powders	17
C7429-90-5	Aluminum, as Al soluble salts	6.7
C7429-90-5	Aluminum, as Al welding fumes	17
504-29-0	2-Aminopyridine	6.3
7664-41-7	Ammonia	100
12125-02-9	Ammonium chloride fume	33
3825-26-1	Ammonium perfluorooctanoate	0.33
7773-06-0	Ammonium sulfamate	33
628-63-7	n-Amyl acetate	1800
626-38-0	sec-Amyl acetate	2200
62-53-3	Aniline & homologues	1.0
29191-52-4	Anisidine (o-,p- isomers)	1.7
C7440-36-0	Antimony & compounds as Sb	1.7
1309-64-4	Antimony trioxide, as Sb	1.7
7784-42-1	Arsine	0.53
8052-42-4	Asphalt (petroleum) fumes	17
1912-24-9	Atrazine	17
86-50-0	Azinphos-methyl	0.67
C7440-39-3	Barium, soluble compounds Ba	1.7

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
17804-35-2	Benomyl	33
98-07-7	Benzotrichloride	—
94-36-0	Benzoyl Peroxide	17
100-44-7	Benzyl chloride	17
92-52-4	Biphenyl	4.3
1304-82-1	Bismuth telluride	33
1304-82-1	Bismuth telluride Se doped	17
C1303-96-4	Borates, anhydrous	3.3
C1303-96-4	Borates, decahydrate	17
C1303-96-4	Borates, pentahydrate	3.3
1303-86-2	Boron oxide	33
10294-33-4	Boron tribromide	33
76737-07-2	Boron trifluoride	9.3
314-40-9	Bromacil	33
7726-95-6	Bromine	2.2
7789-30-2	Bromine pentafluoride	2.4
106-97-8	Butane	6300.0
111-76-2	2-Butoxyethanol	400
123-86-4	n-Butyl acetate	2400
105-46-4	sec-Butyl acetate	3200
540-88-5	tert-Butyl acetate	3200
141-32-2	Butyl acrylate	170
71-36-3	n-Butyl alcohol	500
78-92-2	sec-Butyl alcohol	1000
75-65-0	tert-Butyl alcohol	1000
1189-85-1	tert-Butyl chromate, as CrO3	0.33
2426-08-6	n-Butyl glycidyl ether (BGE)	440
138-22-7	n-Butyl lactate	83
109-79-5	n-Butyl mercaptan	6.0
109-73-9	n-Butylamine	50.0
89-72-5	o-sec-Butylphenol	100
98-51-1	p-tert-Butyltoluene	200
156-62-7	Calcium cyanamide	1.7
1305-62-0	Calcium hydroxide	17
1305-78-8	Calcium oxide	6.7
76-22-2	Camphor, synthetic	40
105-60-2	Caprolactam, dust	3.3
105-60-2	Caprolactam, vapor	67
2425-06-1	Captafol	0.33
133-06-2	Captan	17
63-25-2	Carbaryl	17
1563-66-2	Carbofuran	0.33
1333-86-4	Carbon black	12
75-15-0	Carbon disulfide	100
558-13-4	Carbon tetrabromide	4.7
353-50-4	Carbonyl fluoride	18
463-58-1	Carbonyl sulfide	—
120-80-9	Catechol	77
21351-79-1	Cesium hydroxide	6.7
133-90-4	Chloramben	—
55720-99-5	Chlorinated diphenyl oxide (hexachlorophenyl ether)	1.7
7782-50-5	Chlorine	5.0
10049-04-4	Chlorine dioxide	0.2
7790-91-2	Chlorine trifluoride	1.3
600-25-9	1-Chloro-1-nitropropane	33
107-20-0	Chloroacetaldehyde	11
79-11-8	Chloroacetic acid	—
532-27-4	a-Chloroacetophenone	1.1
79-04-9	Chloroacetyl chloride	0.67
2698-41-1	o-Chlorobenylidene malonitrile	1.3
108-90-7	Chlorobenzene	150
74-97-5	Chlorobromomethane	3500
75-45-6	Chlorodifluoromethane	12000
76-15-3	Chloropentafluoroethane	21000
76-06-2	Chloropicrin	2.2
2039-87-4	o-Chlorostyrene	940
95-49-8	o-Chlorotoluene	860

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M³ TWENTY-FOUR-HOUR AVERAGE
2921-88-2	Chlorpyrifos	0.67
C7440-47-3	Chromium (II) compounds, as Cr	1.7
C7440-47-3	Chromium (III) compounds, Cr	1.7
7440-47-3	Chromium (metal)	1.7
14977-61-8	Chromyl chloride	0.53
2971-90-6	Clopidol	33
7440-48-4	Cobalt as Co metal Dust and fume	0.17
10210-68-1	Cobalt carbonyl as Co	0.33
16842-03-8	Cobalt hydrocarbonyl	0.33
C7440-50-8	Copper, Dusts and mists, as Cu	3.3
7440-50-8	Copper, Fume	0.67
—	Cotton dust, raw	0.67
1319-77-3	Cresol, all isomers	73
4170-30-3	Crotonaldehyde	20
299-86-5	Crufomate	17
98-82-2	Cumene	820
420-04-2	Cyanamide	6.7
51-12-5	Cyanides, as CN	17
460-19-5	Cyanogen	67
506-77-4	Cyanogen chloride	2.5
110-82-7	Cyclohexane	3400
108-93-0	Cyclohexanol	690
108-94-1	Cyclohexanone	330
110-83-8	Cyclohexene	3400
108-91-8	Cyclohexylamine	140
121-82-4	Cyclonite	5.0
542-92-7	Cyclopentadiene	680
287-92-3	Cyclopentane	5700
13121-70-5	Cyhexatin	17
17702-41-9	Decaborane	0.83
8065-48-3	Demeton	0.37
123-42-2	Diacetone alcohol	790
333-41-5	Diazinon	0.33
334-88-3	Diazomethane	1.1
19287-45-7	Diborane	0.37
96-12-8	1,2-Dibromo-3-chloropropane	0.20
107-66-4	Dibutyl phosphate	29
84-74-2	Dibutyl phthalate	17
102-81-8	2-N-Dibutylaminoethanol	47
594-72-9	1,1-Dichloro-1-nitroethane	40
118-52-5	1,3-Dichloro-5,5-Dimethyl hydantoin	0.67
7572-29-4	Dichloroacetylene	1.3
95-50-1	o-Dichlorobenzene (1,2-Dichlorobenzene)	1000
75-71-8	Dichlorodifluoromethane	16000
75-34-3	1,1-Dichloroethane	2700
540-59-0	1,2-Dichloroethylene	2600
75-43-4	Dichlorofluoromethane	130
542-75-6	Dichloropropene	20
75-99-0	2,2-Dichloropropionic acid	19
76-14-2	Dichlorotetrafluoroethane	23000
62-73-7	Dichlorvas	3.3
141-66-2	Dicrotophos	0.83
77-73-6	Dicyclopentadiene	100
102-54-5	Dicyclopentadienyl iron	33
111-42-2	Diethanolamine	43
96-22-0	Diethyl ketone	2300
84-66-2	Diethyl phthalate	17
64-67-5	Diethyl sulfate	—
109-89-7	Diethylamine	100
100-37-8	Diethylaminoethanol	170
111-40-0	Diethylene triamine	14
75-61-6	Difluorodibromomethane	2900
2238-07-5	Diglycidyl ether	1.7
108-83-8	Diisobutyl ketone	480
108-18-9	Diisopropylamine	67
127-19-5	Dimethyl acetamide	120
60-11-7	Dimethyl aminoazobenzene	—
79-44-7	Dimethyl carbamoyl chloride	—

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M³ TWENTY-FOUR-HOUR AVERAGE
124-40-3	Dimethylamine	60
121-69-7	Dimethylaniline	83
68-12-2	Dimethylformamide	30
57-14-7	1,1-Dimethylhydrazine	4.0
131-11-3	Dimethylphthalate	17
148-01-6	Dinitolmide	17
534-52-1	Dinitro-o-cresol	0.67
528-29-0	Dinitrobenzene, all isomers	3.3
51-28-5	2,4-Dinitrophenol	—
121-14-2	2,4-Dinitrotoluene	5.0
78-34-2	Dioxathion	0.67
122-39-4	Diphenylamine	33
123-19-3	Dipropyl ketone	780
34590-94-8	Dipropylene glycol methyl ether	2000
85-00-7	Diquat	1.7
97-77-8	Disulfiram	6.7
298-04-4	Disulfuton	0.33
128-37-0	2,6-Ditert. butyl-p-cresol	33
330-54-1	Diuron	33
1321-74-0	Divinyl benzene	180
2104-64-5	EPN	1.7
115-29-7	Endosulfan	0.33
72-20-8	Endrin	0.33
13838-16-9	Enflurane	1900
106-88-7	1,2-Epoxybutane	20
141-43-5	Ethanolamine	25
563-12-2	Ethion	1.3
110-80-5	2-Ethoxyethanol	200
111-15-9	2-Ethoxyethyl acetate	90
141-78-6	Ethyl acetate	4800
140-88-5	Ethyl acrylate	66
64-17-5	Ethyl alcohol	6300
541-85-5	Ethyl amyl ketone	440
100-41-4	Ethyl benzene	1000
74-96-4	Ethyl bromide	3000
106-35-4	Ethyl butyl ketone	780
51-79-5	Ethyl carbamate	—
75-00-3	Ethyl chloride	10000
60-29-7	Ethyl ether	4000
109-94-4	Ethyl formate	1000
75-08-1	Ethyl mercaptan	4.3
78-10-4	Ethyl silicate	280
75-04-7	Ethylamine	60
107-07-3	Ethylene chlorohydrin	11
107-15-3	Ethylene diamine	83
107-21-1	Ethylene glycol	420
628-96-6	Ethylene glycol dinitrate	1.0
151-56-4	Ethylenimine	2.9
16219-75-3	Ethylidene norbornene	83
100-74-3	N-Ethylmorpholine	77
22224-92-6	Fenamiphos	0.33
115-90-2	Fensulfothion	0.33
55-38-9	Fenthion	0.67
14484-64-1	Ferbam	33
12604-58-9	Ferrovanadium dust	3.3
—	Fibrous glass dust	33
—	Fine mineral fibers	33
16984-48-8	Fluorides, as F	8.3
7782-41-4	Fluorine	5.3
944-22-9	Fonofos	0.33
75-12-7	Formamide	60
64-18-6	Formic acid	31
98-01-1	Furfural	26
98-00-1	Furfuryl alcohol	130
7782-65-2	Germanium tetrahydride	2.1
111-30-8	Glutaraldehyde	2.5
556-52-5	Glycidol	250
—	Glycol ethers	—

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
7440-58-6	Hafnium	1.7
151-67-7	Halothane	1300
142-82-5	Heptane (n-Heptane)	5500
87-68-3	Hexachlorobutadiene	0.70
77-47-4	Hexachlorocyclopentadiene	0.33
67-72-1	Hexachloroethane	32
1335-87-1	Hexachloronaphthalene	0.67
684-16-2	Hexafluoroacetone	2.3
822-06-0	Hexamethylene diisocyanate	0.11
100-54-3	Hexane (n-Hexane)	200
—	Hexane, other isomers	5900
591-78-6	2-Hexanone (MBK)	67
108-84-9	sec-Hexyl acetate	980
107-41-5	Hexylene glycol	400
10035-10-6	Hydrogen bromide	33
7647-01-0	Hydrogen chloride	7.0
74-90-8	Hydrogen cyanide	37
7664-39-3	Hydrogen fluoride, as F	8.7
7722-84-1	Hydrogen peroxide	4.7
7783-07-5	Hydrogen selenide, as Se	0.53
7783-06-4	Hydrogen sulfide	0.9
123-31-9	Hydroquinone	6.7
999-61-1	2-Hydroxypropyl acrylate	9.3
95-13-6	Indene	160
C7440-74-6	Indium, & compounds as In	0.33
7553-56-2	Iodine	3.3
75-47-8	Iodoform	33
1309-37-1	Iron oxide fume, Fe_2O_3 as Fe	17
13463-40-6	Iron pentacarbonyl, as Fe	0.83
—	Iron salts, soluble as Fe	3.3
123-92-2	Isoamyl acetate	1700
123-51-3	Isoamyl alcohol	1200
110-19-0	Isobutyl acetate	2400
78-83-1	Isobutyl alcohol	510
26952-21-6	Isocytl alcohol	890
78-59-1	Isophorone	93
4098-71-9	Isophorone diisocyanate	0.15
109-59-1	Isopropoxyethanol	350
108-21-4	Isopropyl acetate	3500
67-63-0	Isopropyl alcohol	3300
108-20-3	Isopropyl ether	3500
4016-14-2	Isopropyl glycidyl ether (IGE)	790
75-31-0	Isopropylamine	40
768-52-5	N-Isopropylaniline	37
463-51-4	Ketene	2.9
3687-31-8	Lead arsenate, as Pb_3 $(A_2O_4)_2$	0.50
7758-97-6	Lead chromate, as Cr	0.040
68476-85-7	Liquified petroleum gas	6000
7580-67-8	Lithium hydride	0.080
1309-48-4	Magnesium oxide fume	33
121-75-5	Malathion	33
108-31-6	Maleic anhydride	3.3
C7439-96-5	Manganese dust & compounds	0.40
C7439-96-5	Manganese fume	3.3
12079-65-1	Manganese cyclopentadienyl tricarbonyl	0.33
C7439-97-6	Mercury, Aryl & inorganic cmpd	0.33
C7439-97-6	Mercury, as Hg Alkyl compounds	0.33
C7439-97-6	Mercury, vapors except alkyl	0.17
141-79-7	Mesityl oxide	200
79-41-4	Methacrylic acid	230
16752-77-5	Methomyl	8.3
72-43-5	Methoxychlor	33
109-86-4	2-Methoxyethanol	20
110-49-6	2-Methoxyethyl acetate	80
150-76-5	4-Methoxyphenol	17
137-05-3	Methyl 2-cyanoacrylate	30
79-20-9	Methyl acetate	2000
74-99-7	Methyl acetylene	5500

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
59355-75-8	Methyl acetylene-propadiene mixture (MAPP)	5500
96-33-3	Methyl acrylate	120
67-56-1	Methyl alcohol	870
100-61-8	N-Methyl aniline	7.3
74-83-9	Methyl bromide	5.0
74-87-3	Methyl chloride	340
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)	6400
8022-00-2	Methyl demeton	1.7
78-93-3	Methyl ethyl ketone (MEK)	1000
1338-23-4	Methyl ethyl ketone peroxide	5.0
107-31-3	Methyl formate	820
60-34-4	Methyl hydrazine	1.2
74-88-4	Methyl iodide	40
110-12-3	Methyl isoamyl ketone	780
108-11-2	Methyl isobutyl carbinol	350
108-10-1	Methyl isobutyl ketone (MIBK)	680
624-83-9	Methyl isocyanate	0.16
563-80-4	Methyl isopropyl ketone	2300
74-93-1	Methyl mercaptan	3.3
80-62-6	Methyl methacrylate	1400
110-43-0	Methyl n-amyl ketone	780
591-78-6	Methyl n-butyl ketone	67
298-00-0	Methyl parathion	0.67
107-87-9	Methyl propyl ketone	2300
681-84-5	Methyl silicate	20
1634-04-4	Methyl tert-butyl ether	500
98-83-9	a-Methyl styrene	810
126-98-7	Methylacrylonitrile	9.0
109-87-5	Methylal	10000
74-89-5	Methylamine	43
108-87-2	Methylcyclohexane	5400
25639-42-3	Methylcyclohexanol	780
583-60-8	o-Methylcyclohexanone	760
12108-13-3	Methylcyclopentadienyl manganese tricarbonyl	0.67
5124-30-1	Methylene bis (4-cyclo-hexylisocyanate)	0.18
101-68-8	Methylene bis(phenyl isocyanate)	0.2
21087-64-9	Metribuzin	17
7786-34-7	Mevinphos	0.33
C7439-98-7	Molybdenum, as Mo soluble cpds	17
C7439-98-7	Molybdenum, insoluble cpds	33
6923-22-4	Monocrotophos	0.83
110-91-8	Morpholine	240
300-76-5	Naled	10
91-20-3	Napthalene	170
54-11-5	Nicotine	1.7
1929-82-4	Nitrapyrin	33
7697-37-2	Nitric acid	17
10102-43-9	Nitric oxide	100
100-01-6	p-Nitroaniline	10
98-95-3	Nitrobenzene	1.7
100-00-5	p-Nitrochlorobenzene	2.0
79-24-3	Nitroethane	1000
7783-54-2	Nitrogen trifluoride	97
92-93-3	4-Nitrobiphenyl	—
55-63-0	Nitroglycerin	1.5
75-52-5	Nitromethane	830
100-02-7	4-Nitrophenol	—
108-03-2	1-Nitropropane	20
684-93-5	N-Nitroso-N-methylurea	—
88-72-2	Nitrotoluene	37
111-84-2	Nonane	3500
2234-13-1	Octachloronaphthalene	0.33
111-65-9	Octane	4700
8012-95-1	Oil mist, mineral	17
20816-12-0	Osmium tetroxide, as Os	0.0053
144-62-7	Oxalic acid	3.3

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
7783-41-7	Oxygen difluoride	0.37
8002-74-2	Parafin wax fume	6.7
4685-14-7	Paraquat	4.5
56-38-2	Parathion	0.33
19624-22-7	Pentaborane	0.043
1321-64-8	Pentachloronaphthalene	1.7
82-68-8	Pentachloronitrobenzene (quintobenzene)	1.7
109-66-0	Pentane	6000
594-42-3	Perchloromethyl mercaptan	2.5
7616-94-6	Perchloryl fluoride	43
108-95-2	Phenol	63
92-84-2	Phenothiazine	1.7
101-84-8	Phenyl ether	23
122-60-1	Phenyl glycidyl ether	2000
108-98-5	Phenyl mercaptan	7.7
106-50-3	p-Phenylenediamine	0.33
100-63-0	Phenylhydrazine	1.5
638-21-1	Phenylphosphine	0.77
298-02-2	Phorate	0.17
75-44-5	Phosgene	1.3
7803-51-2	Phosphine	1.3
7664-38-2	Phosphoric acid	3.3
7723-14-0	Phosphorus	0.33
10025-87-3	Phosphorus oxychloride	2.1
10026-13-8	Phosphorus pentachloride	2.8
1314-80-3	Phosphorus pentasulfide	3.3
7719-12-2	Phosphorus trichloride	3.7
85-44-9	Phthalic anhydride	20
626-17-5	m-Phthalodinitrile	17
1918-02-1	Picloram	33
88-89-1	Picric acid	0.33
83-26-1	Pindone	0.033
142-64-3	Piperazine dihydrochloride	17
7440-06-4	Platinum, Metal	3.3
C7440-06-4	Platinum, Soluble salts as Pt	0.0067
1310-58-3	Potassium hydroxide	6.7
107-19-7	Propargyl alcohol	7.7
57-57-8	B-Propiolactone	5.0
123-38-6	Propionaldehyde	—
114-26-1	Propoxur	1.7
79-09-4	Propionic acid	100
109-60-4	n-Propyl acetate	2800
71-23-8	n-Propyl alcohol	1600
627-13-4	n-Propyl nitrate	360
6423-43-4	Propylene glycol dinitrate	1.1
107-98-2	Propylene glycol monomethyl ether	2000
75-55-8	Propylene imine	16
8003-34-7	Pyrethrum	1.7
110-86-1	Pyridine	53
91-22-5	Quinoline	—
106-51-4	Quinone	1.5
108-46-3	Resorcinol	150
7440-16-6	Rhodium Metal	3.3
C7440-16-6	Rhodium, Insoluble compounds	3.3
C7440-16-6	Rhodium, Soluble compounds	0.033
299-84-3	Ronnel	33
83-79-4	Rotenone	17
—	Rubber solvent (Naphtha)	5300
C7782-49-2	Selenium compounds, as Se	0.67
7783-79-1	Selenium hexafluoride, as Se	0.53
136-78-7	Sesone	33
7803-62-5	Silicon tetrahydride	22
7440-22-4	Silver, Metal	0.33
C7440-22-4	Silver, soluble compounds as Ag	0.033
26628-22-8	Sodium azide	1.0
7631-90-5	Sodium bisulfite	17
62-74-8	Sodium fluoroacetate	0.17
1310-73-2	Sodium hydroxide	6.7

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
7681-57-4	Sodium metabisulfite	17
7803-52-3	Stibine	1.7
57-24-9	Strychnine	0.5
100-42-5	Styrene	1000
96-9-3	Styrene oxide	—
1395-21-7	Subtilisins	0.0002
3689-24-5	Sulfotep	0.67
2551-62-4	Sulfur hexafluoride	20000
10025-67-9	Sulfur monochloride	18
5714-22-7	Sulfur pentafluoride	0.33
7783-60-0	Sulfur tetrafluoride	1.5
7664-93-9	Sulfuric acid	3.3
2699-79-8	Sulfuryl fluoride	67
35400-43-2	Sulprofos	3.3
93-76-5	2,4,5-T	33
107-49-3	TEPP	0.16
C7440-25-7	Tantalum, metal & oxide dusts	17
C13494-80-9	Tellurium & compounds as Te	0.33
7783-80-4	Tellurium hexafluoride, as Te	0.33
3383-96-8	Temephos	33
26140-60-3	Terphenyls	16
76-12-0	1,1,2,2-Tetrachloro-1,2-difluoroethane	14000
76-11-9	1,1,1,2-Tetrachloro-2,2-difluoroethane	14000
79-34-5	1,1,2,2-Tetrachloroethane	23
1335-88-2	Tetrachloronaphthalene	6.7
78-00-2	Tetraethyl lead, as Pb	0.33
109-99-9	Tetrahydrofuran	2000
75-74-1	Tetramethyl lead, as Pb	0.5
3333-52-6	Tetramethyl succinonitrile	9.3
509-14-8	Tetranitromethane	27
7722-88-5	Tetrasodium pyrophosphate	17
479-45-8	Tetryl	5.0
C7440-28-0	Thallium, soluble compounds, Tl	0.33
96-69-5	4,4-Thiobis(6-tert, butyl-m-cresol)	33
68-11-1	Thioglycolic acid	13
7719-09-7	Thionyl chloride	16
137-26-8	Thiram	3.3
7440-31-5	Tin, Metal	6.7
C7440-31-5	Tin, Organic compounds, as Sn	0.33
7440-31-5	Tin, oxide & inorganic except SnH_4	6.7
7550-45-0	Titanium tetrachloride	—
108-88-3	Toluene	400
108-44-1	m-Toluidine	29
106-49-0	p-Toluidine	29
126-73-8	Tributyl phosphate	7.3
76-13-1	1,1,2-Trichloro-1,2,2-trifluorethane	27000
76-03-9	Trichloroacetic acid	22
120-82-1	1,2,4-Trichlorobenzene	120
79-00-5	1,1,2-Trichloroethane	180
75-69-4	Trichlorofluoromethane	19000
1321-65-9	Trichloronaphthalene	17
95-95-4	2,4,5-Trichlorophenol	—
96-18-4	1,2,3-Trichloropropane	200
121-44-8	Triethylamine	7.0
75-63-8	Trifluorobromomethane	20000
1582-09-8	Trifluralin	—
552-30-7	Trimellitic anhydride	0.13
2551-13-7	Trimethyl benzene	420
540-84-1	2,2,4-Trimethylpentane	—
121-45-9	Trimethyl phosphite	33
75-50-3	Trimethylamine	80
118-96-7	2,4,6-Trinitrotoluene	1.7
78-30-8	Triorthocresyl phosphate	0.33
603-34-9	Triphenyl amine	17
115-86-6	Triphenyl phosphate	10
C7440-33-7	Tungsten, Insoluble compounds	17
C7440-33-7	Tungsten, Soluble compounds	3.3
8006-64-2	Turpentine	1900

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M³ TWENTY-FOUR-HOUR AVERAGE
C7440-61-1	Uranium, insoluble & soluble	0.67
8032-32-4	VM & P Naphtha	4600
110-62-3	n-Valeraldehyde	590
1314-62-1	Vanadium, as V_2O_5	0.17
108-05-4	Vinyl acetate	200
593-60-2	Vinyl bromide	73
106-87-6	Vinyl cyclohexene dioxide	200
75-35-4	Vinylidene chloride	67
25013-15-4	Vinyl toluene	800
81-81-2	Warfarin	0.33
—	Welding fumes	17
1477-55-0	m-Xylene a,a'-diamine	0.33
1330-20-7	Xylenes (m-,o-,p-isomers)	1500
1300-73-8	Xylidine	8.3
C7440-65-5	Yttrium, metal and cpds as Y	3.3
7646-85-7	Zinc chloride fume	3.3
13530-65-9	Zinc chromates	0.033
1314-13-2	Zinc oxide, fume	17
C7440-67-7	Zirconium compounds, as Zr	17

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-160, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-160, filed 6/18/91, effective 9/18/91.]

Chapter 173-470 WAC

AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER

(Formerly chapter 18-40 WAC)

WAC

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.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-470-030, filed 1/3/89. 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. (1) The level of the 24-hour ambient air quality standard for total suspended particulate is 150 micrograms per cubic meter ($\mu g/m^3$), 24-hour average concentration. The standard is attained when the number of days per calendar year is less than or equal to one for measured 24-hour concentrations above 150 $\mu g/m^3$.

(2) The level of the annual standard for total suspended particulate is sixty micrograms per cubic meter ($\mu g/m^3$), annual geometric mean. The standard is attained when the annual geometric mean concentration is less than or equal to 60 $\mu g/m^3$.

(3) The level of the 24-hour ambient air quality standard for PM-10 is 150 micrograms per cubic meter ($\mu g/m^3$), 24-hour average concentration. The standard is attained when:

(a) The expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$, as determined in accordance with 40 CFR 50 Appendix K as in effect on July 1, 1988, is equal to or less than one; and

(b) The number of days per calendar year the measured 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one.

(4) The level of the annual standard for PM-10 is 50 micrograms per cubic meter ($\mu g/m^3$), annual arithmetic mean. The standard is attained when the expected annual arithmetic mean concentration, as determined in accordance with 40 CFR 50 Appendix K as in effect on July 1, 1988, is less than or equal to 50 $\mu g/m^3$.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-470-100, filed 1/3/89. 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/m^2) per month in an industrial area; or

(b) Five grams per square meter (5 g/m^2) per month in an 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/m^2) per month in residential and commercial areas.

(d) Three and one-half grams per square meter (3.5 g/m^2) 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/m^2) 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/m^2) per month plus background in an industrial area; or

(b) One and one-half grams per square meter (1.5 g/m^2) 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.]

Chapter 173-474 WAC
AMBIENT AIR QUALITY STANDARDS FOR SULFUR OXIDES

(Formerly chapter 18-56 WAC)

WAC

WAC 173-474-010 Purpose. This chapter promulgated under RCW 70.94.305 and 70.94.331 establishes maximum acceptable levels for sulfur dioxide as a measure of the sulfur oxide concentration in the ambient air.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-010, filed 9/30/87.]

WAC 173-474-015 Objective. In recognition of the need to continue improvement of the quality of the air resource, the department intends to work toward the achievement of the following objective: The sulfur oxide concentration measured as sulfur dioxide at a primary air mass station, primary ground level monitoring station, or special station shall not be greater than three-tenths per million (0.3 ppm) average for five minutes.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-015, filed 9/30/87.]

WAC 173-474-020 Applicability. The provisions of this chapter apply to all areas of the state of Washington.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-020, filed 9/30/87.]

WAC 173-474-030 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 sulfur oxide as follows:

"Period" means any interval of the specified time.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-030, filed 9/30/87.]

WAC 173-474-100 Air quality standards. Sulfur oxide in the ambient air, measured as sulfur dioxide shall not exceed the following values:

(1) Four-tenths parts per million (0.4 PPM) by volume average for a one-hour period more than once per one-year period.

(2) Twenty-five one-hundredths parts per million (0.25 PPM) by volume average for a one-hour period more than twice in a consecutive seven-day period.

(3) One-tenth parts per million (0.1 PPM) by volume average for a one-day period more than once per one-year period.

(4) Two one-hundredths parts per million (0.02 PPM) by volume average for a one-year period.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-100, filed 9/30/87.]

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.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-150, filed 9/30/87.]

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.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-160, filed 9/30/87.]

Chapter 173-475 WAC

AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE, OZONE, AND NITROGEN DIOXIDE

WAC

WAC 173-475-010 Purpose. These rules implement chapter 70.94 RCW, the Washington State Clean Air Act, and chapter 163, Laws of 1979 ex. sess. The purpose of this chapter is to set statewide air quality standards for carbon monoxide, ozone, and nitrogen dioxide.

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-010, filed 2/29/80.]

WAC 173-475-020 Definitions. (1) "Air quality standard" means an established concentration, exposure time, or frequency of occurrence of a contaminant or multiple contaminants in the ambient air which shall not be exceeded.

(2) "Ambient air" means the surrounding outside air.

(3) "Department" means the state department of ecology.

(4) "National air monitoring stations (NAMS)" means fixed monitoring stations operated by the state and local air pollution control agencies to meet national monitoring objectives. The stations are a subset of the SLAMS network and are sited with emphasis on urban and multi-source areas.

(5) "State and local air monitoring stations (SLAMS)" means stations designed to meet any of four basic monitoring objectives:

(a) To determine highest concentrations expected to occur;

(b) To determine representative concentrations in areas of high population density;

(c) To determine the impact on ambient air pollution levels of significant sources or source categories; and

(d) To determine general background concentration levels.

(6) "Special purpose monitoring stations (SPMS)" means monitoring stations operated by state and local air pollution control agencies to supplement the SLAMS network in order to increase the overall effectiveness of the state's monitoring efforts.

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-020, filed 2/29/80. Formerly chapters 18-32 and 18-46 WAC (part).]

WAC 173-475-030 Air quality standards. (1) Carbon monoxide in the ambient air as measured at a SPMS designated by the department for the purpose of determining compliance with air quality standards, or at any NAMS or SLAMS, shall not exceed the following values:

(a) Nine parts per million (ten milligrams per cubic meter) eight-hour average concentration not to be exceeded more than once per year at any location where people would be exposed to such concentrations for eight consecutive hours or more. Compliance shall be based on data that begins and ends on a clock hour. There shall be no overlapping of hours in any violation period. A maximum of three violations can occur in any one day.

(b) Thirty-five parts per million (forty milligrams per cubic meter) one-hour average concentration not to be exceeded more than once per year at any location where people would be exposed to such concentrations for one hour or more. Compliance shall be determined from data that begins on a clock hour.

(2) Ozone in the ambient air as measured at a SPMS designated by the department for the purpose of determining compliance with this air quality standard, or at any NAMS or SLAMS, shall not exceed 0.12 parts per million (two hundred and thirty-five milligrams per cubic meter) hourly concentration on more than 1.0 days per calendar year as determined under the following conditions:

(a) Three calendar years of data shall be used in determining compliance with this standard. If three years of data are not available, a minimum of one calendar year must be used;

(b) All hourly measurements must start on the clock hour; and

(c) All daily maximum hourly averages not available for a year shall be accounted for by use of the following equation:

$$e = v + v/n\ (N\text{-}n\text{-}z)$$

e = the estimated number of potential times the allowed concentrations are exceeded for the year.

N = the number of required monitoring days in the year.

n = the number of days that valid data was available.

v = the number of days that readings have exceeded compliance level.

z = the number of days that readings are assumed to be less than the level of the standard. If a day should be included is based on whether the daily maximum one-hour reading on both the preceding day and the following day do not exceed 0.09 ppm ozone.

(3) Nitrogen dioxide. The annual arithmetic mean of nitrogen dioxide readings in the ambient air measured at a SPMS designated by the department for the purpose of determining compliance with this air quality standard, or at any NAMS or SLAMS, shall not exceed 0.05 parts per million (one hundred micrograms per cubic meter).

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-030, filed 2/29/80. Formerly WAC 18-32-020 and 18-46-030.]

WAC 173-475-040 Measurement methods. Measurements for determining compliance with WAC 173-475-030

shall be made by equipment and procedures approved by and on file with the department. All methods and procedures shall be available to the public upon request.

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-040, filed 2/29/80. Formerly WAC 18-32-040 and 18-46-040.]

WAC 173-475-050 Reporting of data. Local and regional air pollution control agencies shall notify the department of all occurrences which exceed the applicable standards for carbon monoxide, ozone, or nitrogen dioxide. Notification shall be made quarterly and shall include:

(a) Location of monitoring sites by address and UTM coordinates;

(b) Date and time of each violation;

(c) Concentrations recorded; and

(d) Method of sampling used.

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-050, filed 2/29/80. Formerly WAC 18-32-050 and 18-46-050.]

Chapter 173-480 WAC
AMBIENT AIR QUALITY STANDARDS AND EMISSION LIMITS FOR RADIONUCLIDES

WAC

WAC 173-480-010 Purpose. The purpose of this chapter is to define maximum allowable levels for radionuclides in the ambient air and control emissions from specific sources.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-010, filed 5/7/86.]

WAC 173-480-020 Applicability. (1) The ambient air standards shall apply to the entire state. Measurements may be made at all points up to property lines of point, area and fugitive emission sources.

(2) The emission limits of this chapter shall apply to all radionuclide emission units.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-020, filed 5/7/86.]

WAC 173-480-030 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 the standards and limits of radionuclides as defined in this section.

(1) Best available radionuclide control technology "BARCT" means technology which will result in a radionuclide emission limitation based on the maximum degree of reduction for radionuclides which would be emitted from any proposed new or modified emission units 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 emission unit or modification through application of production processes or available methods, systems, and techniques. In no event shall application of best available radionuclide technology result in emissions of radionuclides which would exceed the ambient annual standard limitation specified in this chapter.

(2) "Critical organ" means the most exposed human organ or tissue exclusive of the skin (integumentary system) and the cornea.

(3) "Dose equivalent" means the product of absorbed dose and appropriate factors to account for differences in biological effectiveness due to the quantity of radiation and its distribution in the body.

(4) "Radionuclide" means any nuclide that emits radiation.

(5) "Rem" means a unit of dose equivalent radiation.

(6) "Whole body" means all human organs or tissue exclusive of the skin (integumentary system) and the cornea.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-030, filed 5/7/86.]

WAC 173-480-040 Ambient standard. Emissions of radionuclides in the air shall not cause a maximum accumulated dose equivalent of more than 25 mrem/y to the whole body or 75 mrem/y to a critical organ of any member of the public. Doses due to radon-220, radon-222, and their respective decay products are excluded from these limits. Compliance with the standard shall be determined by procedures in WAC 173-480-070.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-040, filed 5/7/86.]

WAC 173-480-050 General standards for maximum permissible emissions. (1) All radionuclide emission units are required to meet the emission standards in this chapter. At a minimum all emission units shall meet WAC 402-10-010 requiring every reasonable effort to maintain radioactive materials in effluents to unrestricted areas, as low as reasonably achievable (ALARA). For the purposes of this chapter, control equipment of facilities operating under ALARA shall be defined as reasonably available control technology (RACT).

(2) PSD: The emission requirements for an emission unit of radionuclides shall be the same for all areas of the state independent of prevention of significant deterioration (PSD) classification.

(3) Whenever another federal or state regulation or limitation in effect controls the emission of radionuclides to the ambient air, the more stringent control of emissions shall govern.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-050, filed 5/7/86.]

WAC 173-480-060 Emission standards for new and modified emission units. (1) Whenever the construction, installation or establishment of a new emission unit subject to

this chapter is contemplated, the project shall utilize best available radionuclide control technology (BARCT).

(2) Addition to, enlargement, modification, replacement, alteration of any process or emission unit or replacement of air pollution control equipment which will significantly change potential radionuclide emissions or significantly change the dose equivalent will require the proposed project to utilize best available radionuclide control technology (BARCT) for emission control.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-060, filed 5/7/86.]

WAC 173-480-070 Emission monitoring and compliance procedures. (1) The procedures specified in chapter 402-80 WAC shall be used to determine compliance with the standard. Radionuclide emissions shall be determined and dose equivalents to members of the public shall be calculated using department of social and health services approved sampling procedures, department of social and health services approved models, or other procedures, including those based on environmental measurements that department of social and health services has determined to be suitable.

(2) Compliance with this standard shall be determined by calculating the dose to members of the public at the point of maximum annual air concentration in an unrestricted area where any member of the public may be.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-070, filed 5/7/86.]

WAC 173-480-080 Regulatory actions and penalties. (1) The department or any activated local air pollution control authority may enforce this chapter with the provisions of WAC 173-403-170, Regulatory actions; and 173-403-180, Criminal penalties.

(2) The responsible person may also be subject to the provisions of RCW 34.04.030, Emergency rules and amendments; 70.98.130, Administrative procedure; 70.98.140, Injunction proceedings; and 70.98.200, Penalties as cited by the department of social and health services.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-080, filed 5/7/86.]

Chapter 173-481 WAC
AMBIENT AIR QUALITY AND ENVIRONMENTAL STANDARDS FOR FLUORIDES

(Formerly chapter 18-48 WAC)

WAC

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.

[Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-010, filed 9/16/87.]

WAC 173-481-020 Applicability. The provisions of this chapter apply to all areas of the state of Washington.

[Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-020, filed 9/16/87.]

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.

[Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-030, filed 9/16/87.]

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.

[Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-100, filed 9/16/87.]

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 $\mu g/m^3$) average for any twelve consecutive hours;

(b) Two and nine-tenths micrograms per cubic meter (2.9 $\mu g/m^3$) average for any twenty-four consecutive hours;

(c) One and seven-tenths micrograms per cubic meter (1.7 $\mu g/m^3$) average for any seven consecutive days;

(d) Eighty-four one-hundredths micrograms per cubic meter (0.84 $\mu g/m^3$) average for any thirty consecutive days;

(e) Five-tenths micrograms per cubic meter (0.5 $\mu g/m^3$) average for the period March 1 through October 31 of any year.

[Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-110, filed 9/16/87.]

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 173-490 WAC

EMISSION STANDARDS AND CONTROLS FOR SOURCES EMITTING VOLATILE ORGANIC COMPOUNDS (VOC)

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-490-070	Schedule of control dates. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-070, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-070, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-071	Alternative schedule of control dates. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-071, filed 8/20/80.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-120	Compliance schedules. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-120, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-130	Regulatory actions. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-130, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-135	Criminal penalties. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-135, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-140	Appeals. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-140, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-150	Variance. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-150, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-150, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-203	Perchloroethylene dry cleaning systems. [Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-203, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-203, filed 7/27/82. Statutory Authority: RCW 70.94.331, 70.94.510, and 70.94.785. 81-03-003 (Order DE 80-54), § 173-490-203, filed 1/8/81. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-203, filed 8/20/80.] Repealed by 98-04-061 (Order 97-37), filed 2/2/98, effective 3/5/98. Statutory Authority: Chapter 70.98 RCW.
173-490-206	Synthesized pharmaceutical products. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-206, filed 8/20/80.] Repealed by 82-16-021 (Order DE 82-22), filed 7/27/82. Statutory Authority: Chapters 70.94 and 43.21A RCW.

WAC 173-490-010 Policy and purpose. (1) It is the policy of the department of ecology (ecology) under the authority vested in it by chapter 43.21A RCW to provide for the systematic control of air pollution from air contaminant sources and for the proper development of the state's natural resources.

(2) It is the purpose of this chapter to establish technically feasible and reasonably attainable standards for sources emitting volatile organic compounds (VOCs) and revise such standards as new information and better technology are developed and become available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-010, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-010, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-010, filed 5/8/79.]

WAC 173-490-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are by this reference incorporated into this chapter. Unless a different meaning is clearly required by context, the following words and phrases, as used in this chapter, shall have the following meanings:

(1) "Bottom loading" means the filling of a tank through a line entering the bottom of the tank.

(2) "Bulk gasoline plant" means a gasoline storage and transfer facility that receives more than ninety percent of its annual gasoline throughput by transport tank, and reloads gasoline into transport tanks.

(3) "Class II hardboard paneling finish" means finishes which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

(4) "Closed refinery system" means a system that will process or dispose of those VOCs collected from another system. The mass quantity of collected VOCs emitted to the ambient air from the closed refinery system shall not exceed that required for a disposal system.

(5) "Condensate" means hydrocarbon liquid separated from a gas stream which condenses due to changes in the temperature or pressure and remains liquid at standard conditions.

(6) "Condenser" means a device for cooling a gas stream to a temperature where specific VOCs become liquid and are removed.

(7) "Control system" means one or more control devices, including condensers, that are designed and operated to reduce the quantity of VOCs emitted to the atmosphere.

(8) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and sulfur, nitrogen or oxygen derivatives of hydrocarbons which is a liquid at standard conditions.

(9) "Cutback asphalt" means an asphalt that has been blended with petroleum distillates to reduce the viscosity for ease of handling and lower application temperature. An inverted emulsified asphalt shall be considered a cutback asphalt when the continuous phase of the emulsion is a cutback asphalt.

(10) "Disposal system" means a process or device that reduces the mass quantity of the VOC that would have been emitted to the ambient air by at least ninety percent prior to their actual emission.

(11) "Dry cleaning facility" means a facility engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one or more washes in solvent, extraction of excess solvent by spinning, and drying by tumbling in an airstream. The facility includes, but is not limited to, any washer, dryer, filter and purification system(s), waste disposal system(s), holding tank(s), pump(s) and attendant piping and valve(s).

(12) "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

(13) "Flexographic printing" means the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

(14) "Gasoline" means a petroleum distillate which is a liquid at standard conditions and has a true vapor pressure greater than 200 mm of Hg (4 psia) at 20°C, and is used as a fuel for internal combustion engines.

(15) "Gasoline dispensing facility" means any site dispensing gasoline into motor vehicle fuel tanks from stationary storage tanks.

(16) "Gasoline loading terminal" means a gasoline transfer facility that receives more than ten percent of its annual gasoline throughput solely or in combination by pipeline, ship or barge, and loads gasoline into transport tanks.

(17) "Hardboard" means a panel manufactured primarily from interfelted lignocellulosic fibers which are consolidated under heat and pressure in a hot press.

(18) "Hardwood plywood" means plywood whose surface layer is a veneer of hardwood.

(19) "Lease custody transfer" means the transfer of produced crude oil or condensate, after processing or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(20) "Liquid-mounted seal" means a primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof.

(21) "Liquid service" means equipment that processes, transfers or contains a VOC or VOCs in the liquid phase.

(22) "Low organic solvent coating" refers to coatings which contain less organic solvent than the conventional coatings used by the industry. Low organic solvent coatings include water-borne, higher solids, electrodeposition and powder coatings.

(23) "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

(24) "Packaging rotogravure printing" means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into packaging products and labels for articles to be sold.

(25) "Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

(26) "Petroleum refinery" means a facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products by distilling crude oils or redistilling, cracking, extracting or reforming unfinished petroleum derivatives. Not included are facilities re-refining used motor oils or waste chemicals, processing finished petroleum products, separating blended products, or air blowing asphalt.

(27) "Prime coat" means the first of two or more films of coating applied in an operation.

(28) "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

(29) "Proper attachment fittings" means hardware for the attachment of gasoline transfer or vapor collection lines that meet or exceed industrial standards or specifications and the standards of other agencies or institutions responsible for safety and health.

(30) "Publication rotogravure printing" means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

(31) "Refinery unit" means a set of components that are a part of a basic process operation, such as distillation, hydrotreating, cracking or reforming of hydrocarbons.

(32) "Roll printing" means the application of words, designs, and pictures to a substrate usually by means of a

series of hard rubber or steel rolls each with only partial coverage.

(33) "Rotogravure printing" means the application of words, designs, and pictures to a substrate by means of a roll printing technique which involves intaglio or recessed image areas in the form of cells.

(34) "Single coat" means only one film of coating is applied to the metal substrate.

(35) "Submerged fill line" means a pipe, tube, fitting or other hardware for loading liquids into a tank with either a discharge opening flush with the tank bottom; or with a discharge opening below the lowest normal operating drawoff level or that level determined by a liquid depth two and one half times the fill line diameter when measured in the main portion of the tank, but not in sumps or similar protrusions.

(36) "Submerged loading" means the filling of a tank with a submerged fill line descending nearly to the bottom.

(37) "Suitable closure or cover" means a door, hatch, cover, lid, pipe cap, pipe blind, valve or similar device that prevents the accidental spilling or emitting of VOC. Pressure relief valves, aspirator vents or other devices specifically required for safety and fire protection are not included.

(38) "Thin particleboard" means a manufactured board one-quarter inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.

(39) "Tileboard" means paneling that has a colored waterproof surface coating.

(40) "Topcoat" means the final film or series of films of coating applied in a two-coat (or more) operation.

(41) "Transport tank" means a container used for shipping gasoline on land.

(42) "True vapor pressure" means the equilibrium partial pressure of a petroleum liquid as determined with methods described in American Petroleum Institute Bulletin 2517, 1980.

(43) "Unit turnaround" means the procedure of shutting down, repairing, inspecting, and restarting a unit.

(44) "Valves not externally regulated" means valves that have no external controls, such as in-line check valves.

(45) "Vapor collection system" means a closed system to conduct vapors displaced from a tank being filled into the tank being emptied, a vapor holding tank, or a vapor control system.

(46) "Vapor control system" means a system designed and operated to reduce or limit the emission of VOCs, or to recover the VOCs to prevent their emission into the ambient air.

(47) "Vapor-mounted seal" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

(48) "Volatile organic compound (VOC)" means any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator designates as having negligible photochemical reactivity. VOC may be measured by a reference method, an equivalent method, an alternative method or by procedures specified under 40 CFR Part 60. A reference method, an equivalent method, or an alternative method, however, may also measure nonreactive organic compounds. In such cases, an owner or operator may exclude the nonreactive organic compounds when determining compliance with a standard.

(49) "Waxy, heavy pour crude oil" means a crude oil with a pour point of 50°F or higher as determined by the American Society for Testing and Materials Standard D97-66, "Test for Pour Point of Petroleum Oils."

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-020, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-020, filed 7/27/82. Statutory Authority: RCW 70.94.331, 70.94.510, and 70.94.785. 81-03-003 (Order DE 80-54), § 173-490-020, filed 1/8/81. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-020, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-020, filed 5/8/79.]

WAC 173-490-025 General applicability. In addition to the general applicability of chapter 173-400 WAC to all emission sources, specific emission standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.

(1) This chapter shall apply to the specified emission sources of VOCs located in or operating within designated ozone nonattainment areas of the state of Washington.

(2) This chapter does not apply to those sources under the jurisdiction of the energy facility site evaluation council (EFSEC).

(3) A source of VOC emissions not belonging to any of the categories listed in WAC 173-490-030 nor specifically identified in any section, but which is located on the same or adjacent property and owned or operated by the same person as a regulated emission source, shall not be required to comply with the regulations of this chapter.

(4) Sources of VOC emissions may be exempted, by the director, from any or all requirements to control or reduce the emissions of VOCs when:

(a) The source is a development operation and the equipment is used exclusively for research, laboratory analysis or determination of product quality and commercial acceptance, provided emissions of VOCs from such operations do not exceed 300 kg (660 lbs) per month; or

(b) The source has emissions of VOCs which do not exceed 18 kg (40 lbs) per month and registration is not required under WAC 173-490-030; or

(c) The source is a spray booth which is used solely for maintenance and utility activities and whose emissions do not exceed 18 kg (40 lbs) per month.

(5) Sources of VOCs may be granted exemptions from emissions standards for a period not to exceed thirty days if the source is a newly permitted source which is to replace a similar permitted source and the new source is intended to utilize the existing emission control system. This provision is intended to apply to a break-in period prior to the shutdown and removal of the existing source.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-025, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-025, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-025, filed 8/20/80. Statutory Authority: RCW

43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-025, filed 5/8/79.]

WAC 173-490-030 Registration and reporting. (1) The owner or operator of a stationary emission source of VOCs in the following source categories and located in a designated ozone nonattainment area shall register the source with ecology unless registration is required by an authority or the energy facility site evaluation council (EFSEC).

(a) Petroleum refineries.

(b) Petroleum liquid storage tanks.

(c) Gasoline loading terminals.

(d) Bulk gasoline plants.

(e) Gasoline dispensing facilities.

(f) Surface coaters.

(g) Open top vapor degreasers.

(h) Conveyorized degreasers.

(i) Gasoline transport tanks.

(j) Vapor collection systems.

(k) Perchloroethylene dry cleaning systems.

(l) Graphic arts systems.

(m) Surface coaters of miscellaneous metal parts and products.

(n) Synthesized pharmaceutical manufacturing facilities.

(o) Flatwood panel manufacturers and surface finishing facilities.

(2) A new emission source of VOCs that must comply with any requirements in WAC 173-490-040, 173-490-200, 173-490-201, 173-490-202, 173-490-203, 173-490-204, 173-490-205, 173-490-206 and 173-490-207, shall comply with the requirements of WAC 173-400-100 and shall register with ecology or an authority prior to operation of the new source, and shall submit sufficient information to demonstrate that the new source is capable of complying with the requirements in this chapter. An opportunity shall be provided for an inspection of the new source by ecology or local authority inspectors prior to its operation.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-030, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-030, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-030, filed 5/8/79.]

WAC 173-490-040 Requirements. To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(1) Petroleum refineries.

This chapter shall apply to all petroleum refineries with a crude oil or feed stock capacity greater than one million four hundred thirty thousand liters (9,000 bbl) per day.

(a) Vacuum producing system.

(i) Noncondensable VOC from vacuum producing systems shall be piped to an appropriate firebox, incinerator or to a closed refinery system.

(ii) Hot wells associated with contact condensers shall be tightly covered and the collected VOC introduced into a closed refinery system.

(b) Wastewater separator.

(i) Wastewater separator forebays shall incorporate a floating pontoon or fixed solid cover with all openings sealed, totally enclosing the compartmented liquid contents, or a floating pontoon or a double deck-type cover equipped with closure seals between the cover edge and compartment wall.

(ii) Accesses for gauging and sampling shall be designed to minimize VOC emissions during actual use. All access points shall be closed with suitable covers when not in use.

(c) Process unit turnaround.

(i) The VOC contained in a process unit to be depressurized for turnaround shall be introduced to a closed refinery system, combusted by a flare, or vented to a disposal system.

(ii) The pressure in a process unit following depressurization for turnaround shall be less than five psig before venting to the ambient air.

(iii) Venting or depressurization to the ambient air of a process unit for turnaround at a pressure greater than five psig shall be allowed if the owner demonstrates the actual emission of VOC to the ambient air is less than permitted by WAC 173-490-040 (1)(c)(ii).

(d) Maintenance and operation of emission control equipment. Equipment for the reduction, collection or disposal of VOC shall be maintained and operated in a manner consistent with the level of maintenance and housekeeping of the overall plant.

(2) Petroleum liquid storage tanks.

(a) All fixed-roof tanks (except as noted in subparagraph (d) of this subsection) storing volatile organic petroleum liquids with a true vapor pressure as stored greater than 78 mm of Hg (1.5 psi) at actual monthly average storage temperatures and having a capacity greater than one hundred fifty thousand liters (40,000 gallons) shall comply with one of the following:

(i) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources - Storage Vessels for Petroleum Liquids (40 CFR 60, subpart K); or

(ii) Be retrofitted with a floating roof or internal floating cover using a metallic seal or a nonmetallic resilient seal at least meeting the equipment specifications of the federal standards referred to in WAC 173-490-040 (2)(a)(i) or its equivalent; or

(iii) Be fitted with a floating roof or internal floating cover meeting the manufacturer's specifications in effect when installed.

(b) All seals used in WAC 173-490-040 (2)(a)(ii) and (iii) are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears or other openings.

(c) All openings not related to safety are to be sealed with suitable closures.

(d) Tanks used for the storage of gasoline in bulk gasoline plants and equipped with vapor balance systems as required in WAC 173-490-040 (4)(b) shall be exempt from the requirements of WAC 173-490-040(2).

(3) Gasoline loading terminals.

(a) This chapter shall apply to all gasoline loading terminals with an average annual daily gasoline throughput greater than seventy-five thousand liters (20,000 gallons).

(b) Loading facilities. Facilities for the purpose of loading gasoline into any transport tank shall be equipped with a vapor recovery system (VRS) as described in WAC 173-490-040 (3)(c) and comply with the following conditions:

(i) The loading facility shall employ submerged or bottom loading for all transport tanks.

(ii) The VRS shall be connected to the transport tank being loaded and shall operate during the entire loading of every transport tank loaded at the facility.

(iii) The loading of all transport tanks shall be performed such that ninety percent by weight of the gasoline vapors displaced during filling are prevented from being released to the ambient air. Emissions from pressure relief valves shall not be included in the controlled emissions when the back pressure in the VRS collection lines is lower than the relief pressure setting of the transport tank's relief valves.

(iv) All loading lines and vapor lines shall be equipped to close automatically upon disconnect. The point of closure shall be on the tank side of any hose or intermediate connecting line.

(c) Vapor recovery system (VRS). The VRS shall be designed and built according to accepted industrial practices and meet the following conditions:

(i) The VRS shall prevent at least ninety percent by weight of the gasoline vapors displaced during loading of each transport tank from entering the ambient air and in no case shall the gasoline vapors emitted to the ambient air exceed eighty milligrams per liter of gasoline loaded.

(ii) The VRS shall be equipped with a signal device to alert personnel when the system is not operating or unintentionally shuts down.

(iii) The back pressure in the VRS collection lines shall not exceed the transport tank's pressure relief settings.

(d) Alternative loading facility. The loading of transport tanks by other means and using other vapor control systems shall require the facility owner to demonstrate that the emission of gasoline vapors to the ambient air is less than eighty milligrams per liter of gasoline loaded.

(4) Bulk gasoline plants.

(a) This chapter shall apply to all bulk gasoline plants with an annual average daily gasoline throughput greater than fifteen thousand liters (4,000 gallons).

(b) Storage tanks. All storage tanks with a capacity greater than two thousand one hundred liters (550 gallons) and used for the storage of gasoline shall comply with the following conditions:

(i) Each storage tank shall be equipped with a submerged fill line.

(ii) Each storage tank shall be equipped for vapor balancing of gasoline vapors with transport tanks during gasoline transfer operations.

(iii) The vapor line fittings on the storage tank side of break points with the transport tank vapor connection pipe or hose shall be equipped to close automatically upon planned or unintentional disconnect.

(iv) The pressure relief valves on storage tanks shall be set at the highest possible pressure consistent with local and state codes for fire and safety.

(c) Transport tanks. All transport tanks, except those meeting the conditions in WAC 173-490-040 (4)(d), transferring gasoline with storage tanks in a bulk gasoline plant shall comply with the following conditions:

(i) The transport tank shall be equipped with the proper attachment fittings to make vapor tight connections for vapor balancing with storage tanks.

(ii) The vapor line fittings on the transport tank side of break points with the storage tank connection pipe or hose shall be equipped to close automatically upon planned or unintentional disconnect.

(iii) The pressure relief valves on transport tanks shall be set at the highest possible pressure consistent with local and state codes for fire and safety.

(d) Transport tanks used for gasoline and meeting all of the following conditions shall be exempt from the requirement to be equipped with any attachment fitting for vapor balance lines:

(i) The transport tank is used exclusively for the delivery of gasoline into storage tanks of a facility exempt from the vapor balance requirements of WAC 173-490-040(5); and

(ii) The transport tank has a total capacity less than fifteen thousand liters (4,000 gallons) and is of a compartmented design and construction requiring the installation of four or more separate vapor balance fittings.

(e) Gasoline transfer operations. No owner or operator of a bulk gasoline plant or transport tank shall allow the transfer of gasoline between a transport tank and a storage tank except under the following conditions:

(i) All tanks shall be submerged filled or bottom loaded.

(ii) The loading of all tanks, except those exempted under WAC 173-490-040 (4)(d) shall be performed such that ninety percent by weight of the gasoline vapors displaced during filling are prevented from being released into the ambient air. Emissions from pressure relief valves shall not be included in the controlled emissions.

(f) Equipment or system failures. Failures or leaks in the vapor balance system shall be limited by the following conditions:

(i) During the months of April, May, June, July, August, September and October, failures of the vapor balance system to comply with this chapter shall require that gasoline transfer operations stop for the failed part of the system. Other transfer points that can operate in compliance may be used.

(ii) Loading or unloading of the transport tank connected to the failed part of the vapor balance system may be completed.

(iii) Breakdowns and upset conditions during all months of the year shall also comply with the provisions of WAC 173-400-105(5).

(g) The owner or operator of a bulk gasoline plant or transport tank shall take all reasonable necessary measures to prevent the spilling, discarding in sewers, storing in open containers or handling of gasoline in a manner on the plant site that will result in evaporation to the ambient air.

(5) Gasoline dispensing facilities (Stage I).

(a) This chapter shall apply to all gasoline dispensing facilities with a total annual gasoline output greater than seven hundred fifty-seven thousand liters (200,000 gallons) or sixty-three thousand one hundred liters (16,670 gallons) per month and total gasoline storage capacity greater than thirty-eight thousand liters (10,000 gallons).

(b) All gasoline storage tanks of the facilities defined in WAC 173-490-040 (5)(a) shall be equipped with submerged

or bottom fill lines and fittings for vapor balancing gasoline vapors with the delivery transport tank.

(c) Gasoline storage tanks with offset fill lines shall be exempt from the requirement of WAC 173-490-040 (5)(b) if installed prior to January 1, 1979.

(d) The vapor balance system (for the purpose of measuring compliance with the emission control efficiency) shall consist of the transport tank, gasoline vapor transfer lines, storage tank and all tank vents. The vapor balance system shall prevent at least ninety percent of the displaced gasoline vapors from entering the ambient air. A vapor balance system that is designed, built and operated according to accepted industrial practices will satisfy this requirement.

(e) The owner or operator of a gasoline dispensing facility shall not permit the loading of gasoline into a storage tank equipped with vapor balance fittings unless the vapor balance system is attached to the transport tank and operated satisfactorily.

(6) Surface coaters.

The operation of a coater and dryer, that may serve one or more process lines, shall comply with the following emission limits if the potential uncontrolled emissions of VOC from the coater, flashoff areas, and dryer would be greater than 18 kg (40 pounds) in any given twenty-four hour period. The emission limits and uncontrolled emission quantity shall include the additional quantity of emissions from the dryer during the twelve hour period after application of the coating.

Process Can Coating	Limitation Grams/Liter of Coating (Excluding Water)	lb/Gal.of Coating (Excluding Water)
Sheet basecoat and overvarnish; two-piece can exterior	340	2.8
Two and three piece can interior body spray, two piece can exterior end	510	4.2
Side-seam spray	660	5.5
End sealing compound	440	3.7
Coil coating	310	2.6
Fabric coating	350	2.9
Vinyl coating	450	3.8
Paper coating	350	2.9
Auto and light duty truck coating		
Prime	230	1.9
Topcoat	340	2.8
Repair	580	4.8
Metal furniture coating	360	3.0
Magnet wire coating	200	1.7
Large appliance coating	340	2.8

(7) Open top vapor degreasers.

(a) All open top vapor degreasers shall:

(i) Have a cover that may be readily opened and closed. When a degreaser is equipped with a lip exhaust, the cover shall be located below the lip exhaust. When a degreaser has a freeboard ratio equal to or greater than 0.75 and the opening is greater than one square meter (10 square feet) the cover shall be power operated.

(ii) Have one of the following:

(A) A freeboard ratio equal to or greater than 0.75; or

(B) A freeboard chiller; or

(C) A closed design such that the cover opens only when the part enters or exits the degreaser.

(iii) Be equipped with at least the following three safety switches:

(A) Condenser-flow switch and thermostat (shuts off sump heat if coolant is either not circulating or too warm); and

(B) Spray safety switch (shuts off spray pump if the vapor level drops excessively; and

(C) Vapor level control thermostat (shuts off sump heat when vapor level rises too high).

(iv) Post a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:

(A) Do not degrease porous or absorbent materials such as cloth, leather, wood or rope.

(B) The cover of the degreaser should be closed at all times except when processing workloads.

(C) When the cover is open the lip of the degreaser should not be exposed to steady drafts greater than 15.3 meters per minute (50 feet per minute).

(D) Rack parts so as to facilitate solvent drainage from the parts.

(E) Workloads should not occupy more than one-half of the vapor-air interface area.

(F) When using a powered hoist, the vertical speed of parts in and out of the vapor zone should be less than 3.35 meters per minute (11 feet per minute).

(G) Degrease the workload in the vapor zone until condensation ceases.

(H) Spraying operations should be done within the vapor layer.

(I) Hold parts in the degreaser until visually dry.

(J) When equipped with a lip exhaust, the fan should be turned off when the cover is closed.

(K) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.

(L) Water shall not be visible in the solvent stream from the water separator.

(b) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses. For example, leaks from drain taps, cracked gaskets, and malfunctioning equipment must be repaired immediately.

(c) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.

(d) Still and sump bottoms shall be kept in closed containers.

(e) Waste solvent shall be stored in covered containers and returned to the supplier or to a firm which processes solvents for disposal.

(8) Conveyorized degreasers.

(a) The owner or operator of conveyorized cold cleaners and conveyorized vapor degreasers shall comply with the following operating requirements:

(i) Exhaust ventilation shall not exceed twenty cubic meters per minute per square meter (65 cfm per ft.^{2}) of degreaser opening, unless necessary to meet OSHA requirements.

(ii) Post in the immediate work area a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:

(A) Rack parts for best drainage.

(B) Maintain vertical speed of conveyed parts to less than 3.35 meters per minute (11 feet per minute).

(C) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.

(D) Water shall not be visible in the solvent stream from the water separator.

(iii) Vapor degreasers shall be equipped with at least the following three safety switches:

(A) Condenser flow switch and thermostat (shuts off sump heat if coolant is either not circulating or too warm); and

(B) Spray safety switch (shuts off spray pump if the vapor level drops excessively); and

(C) Vapor level control thermostat (shuts off sump heat when vapor level rises too high).

(b) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses. For example, leaks from drain taps, cracked gaskets, and malfunctioning equipment must be repaired immediately.

(c) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.

(d) Still and sump bottoms shall be kept in closed containers.

(e) Waste solvent shall be stored in covered containers and returned to the supplier or to a firm which processes solvents for disposal.

(f) All conveyorized cold cleaners and conveyorized vapor degreasers with air/vapor interfaces of 2.0 m^2 or greater shall have a carbon adsorption system, exhausting less than 25 ppm of solvent averaged over a complete adsorption cycle (based on exhaust ventilation of 15 m^3 per min per m^2 of air/vapor area, when downtime covers are open), or a system with control effectiveness equal to or better than a carbon adsorption system.

(9) Cutback asphalt paving.

(a) All paving applications of cutback asphalts are prohibited during the months of April, May, June, July, August, September and October, except as provided for in WAC 173-490-040 (9)(b).

(b) The following paving uses and applications of cutback asphalts are permitted during all months of the year.

(i) As a penetrating prime coat on aggregate bases prior to paving.

(ii) The manufacture of patching mixes used exclusively for pavement maintenance and needed to be stockpiled for times longer than one month.

(iii) All paving uses when the temperature during application is below 10°C (50°F). Any person using cutback asphalt for paving shall demonstrate that the ambient air temperature at 8 a.m. (PST) is below 50°F. The paving application of cutback asphalt when the ambient air temperature is 50°F or higher is in violation of this chapter.

(10) Cold cleaners.

(a) The owners or operators of all cold cleaners shall comply with the following equipment specifications:

(i) Be equipped with a cover that is readily opened and closed.

(ii) Be equipped with a drain rack that returns the drained solvent to the solvent bath.

(iii) Have a freeboard ratio of at least 0.5.

(iv) Have a visible fill line.

(b) An owner or operator of a cold cleaner shall be responsible for following the required operating parameters and work practices. The owner shall post and maintain in the work area of each cold cleaner a pictograph or instructions clearly explaining the following work practices:

(i) The solvent level shall not be above the fill line.

(ii) The spraying of parts to be cleaned shall be performed only within the confines of the cold cleaner.

(iii) The cover of the cold cleaner shall be closed when not in use or when parts are being soaked or cleaned by solvent agitation.

(iv) Solvent-cleaned parts shall be rotated to drain cavities or blind holes and then set to drain until dripping has stopped.

(v) Waste solvent shall be stored in covered containers and returned to the supplier or to a firm which processes solvents for disposal.

(c) The owner or operator shall maintain cold cleaners in good working condition and free of solvent leaks.

(d) If the solvent has a vapor pressure greater than 2.0 kPa (0.3 psi) measured at 38°C (100°F), or if the solvent is agitated or heated, then the cover must be designed so that it can be easily operated with one hand.

(e) If the solvent has a vapor pressure greater than 4.3 kPa (0.6 psi) measured at 38°C (100°F), then the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(f) If the solvent has a vapor pressure greater than 4.3 kPa (0.6 psi) measured at 38°C (100°F), or if the solvent is heated above 50°C (120°F), one of the following solvent vapor control systems must be used:

(i) The freeboard ratio must be equal to or greater than 0.70; or

(ii) Water must be kept over the solvent. The solvent must be more dense and insoluble in water.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-040, filed 7/27/82. Statutory Authority: RCW 70.94.331, 70.94.510, and 70.94.785. 81-03-003 (Order DE 80-54), § 173-490-040, filed 1/8/81. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-040, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-040, filed 5/8/79.]

WAC 173-490-080 Exceptions and alternative methods. (1) Other emission reduction methods may be used if the

source operator demonstrates to ecology that they are at least as effective as the required methods; and

(2) The operation of a natural gas-fired incinerator and associated capture system installed for the purpose of complying with this chapter shall be required only during the months of April, May, June, July, August, September and October, unless the operation of such devices is required for purposes of occupational health or safety, or for the control of toxic substances, malodors, or other regulated pollutants.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-080, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-080, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-080, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-080, filed 5/8/79.]

WAC 173-490-090 New source review. The provisions of WAC 173-400-110 shall apply to all new sources and emissions units to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-090, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-090, filed 5/8/79.]

WAC 173-490-200 Petroleum refinery equipment leaks. (1) Specific applicability. This section shall apply to all petroleum refineries as qualified in WAC 173-490-025.

(2) Provisions for specific processes.

(a) The owner(s) or operator(s) of a petroleum refinery shall:

(i) Develop and conduct a monitoring program consistent with the provisions in WAC 173-490-200(3), 173-490-200(4), 173-490-200(5), and 173-400-105;

(ii) Record all leaking components which have a VOC concentration greater than 10,000 ppm when tested according to the provisions in WAC 173-490-200(3) and place an identification tag on each component consistent with the provisions of WAC 173-490-200 (4)(c);

(iii) Correct and retest the leaking component, as defined in WAC 173-490-200 (2)(a)(ii), as soon as practicable, but not later than fifteen days after the leak is recorded. If a leak continues after all reasonable corrective actions have been taken, then the component shall be repaired or replaced on the next scheduled turnaround.

(iv) Identify all leaking components, as defined in WAC 173-490-200 (2)(a)(ii), that cannot be corrected until the refinery unit is shut down for turnaround.

(b) The owner or operator of a petroleum refinery shall not install or operate a valve at the end of a pipe or line containing VOC unless the pipe or line is sealed with a second suitable closure. Exceptions to this requirement are the ends of a pipe or line connected to pressure relief valves, aspirator vents or other devices specifically required to be open for safety protection. The sealing device may be removed only when a sample is being taken or during maintenance operations.

(3) Testing procedures. To demonstrate compliance with this chapter, refer to WAC 173-400-105(5).

(4) Monitoring.

(a) The owner or operator of a petroleum refinery shall conduct a monitoring program consistent with the following provisions:

(i) Monitor yearly by the methods referenced in WAC 173-490-200(3) all pump seals, pipeline valves in liquid service and process drains;

(ii) Monitor quarterly by the methods referenced in WAC 173-490-200(3) all compressor seals, pipeline valves in gaseous service and pressure relief valves in gaseous service;

(iii) Monitor weekly by visual methods all pump seals;

(iv) Monitor immediately any pump seal from which liquids are observed leaking;

(v) Monitor any relief valve within twenty-four hours after it has vented to the atmosphere; and

(vi) After a leaking component is repaired, monitor for leaks prior to return to service.

(b) Pressure relief devices that are connected to an operating flare header, vapor recovery device, inaccessible valves, storage tank valves, and valves that are not externally regulated are exempt from the monitoring requirements in WAC 173-490-200 (4)(a).

(c) The owner or operator of a petroleum refinery, upon the detection of a leaking component, as defined in WAC 173-490-200 (2)(a)(ii), shall affix a weatherproof and readily visible tag, bearing an identification number and the date the leak is located, to the leaking component. This tag shall remain in place until the leak is corrected.

(5) Recordkeeping.

(a) The owner or operator of a petroleum refinery shall maintain a leaking component's monitoring log as specified in WAC 173-490-200 (2)(a)(ii) that shall contain, at a minimum, the following data:

(i) The name of the process unit where the component is located.

(ii) The type of component (e.g., valve, seal).

(iii) The tag number of the component.

(iv) The date on which a leaking component is discovered.

(v) The date on which a leaking component is repaired.

(vi) The date and instrument reading of the recheck procedure after a leaking component is repaired.

(vii) A record of the calibration of the monitoring instrument.

(viii) Those leaks that cannot be repaired until turnaround.

(ix) The total number of components checked and the total number of components found leaking.

(b) Copies of the monitoring log shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report prepared.

(c) Copies of the monitoring log shall immediately be made available to ecology, upon verbal or written request, at any reasonable time.

(6) Reporting. The owner or operator of a petroleum refinery shall notify ecology in writing within forty-five days following each quarterly or annual inspection for component leaks when:

(a) The number of discovered leaks has increased by more than ten percent above the number recorded during the last inspection of the same components;

(b) The number of leaking components has increased for two consecutive quarterly or annual inspections;

(c) The number of leaks not corrected within fifteen days exceeds five percent of the leaks detected;

(d) The next scheduled process unit turnaround needed to repair an uncorrectable leak is more than twelve months away.

(7) Petition for alternative monitoring.

(a) After two complete liquid service inspections and five complete gaseous service inspections, the owner or operator of a petroleum refinery may petition the director for alternative monitoring procedures or a reduction in monitoring frequency.

(b) A petition for alternative monitoring procedures shall contain:

(i) The name and address of the company and the name and telephone number of the responsible person over whose signature the petition is submitted;

(ii) A detailed description of the problems encountered under WAC 173-490-200(4); and

(iii) A detailed description of the alternative monitoring procedures and how this alternative procedure will solve or reduce the problems encountered under WAC 173-490-200(4).

(c) A petition for a reduction in monitoring frequency shall contain:

(i) The information requested in WAC 173-490-200 (7)(b)(i);

(ii) A detailed description of the proposed component-monitoring schedule;

(iii) A demonstration by the owner or operator that the facility is currently operating with a low level of component leaks and is committed to a maintenance program that will assure a frequency and severity of component leaks as good as that attainable under WAC 173-490-200(2).

(d) An approved petition for a reduction in monitoring frequency shall begin with the next quarterly inspection and shall be valid for a period of twelve quarters (three years). At the time of the last inspection in the twelve quarters, a new submittal of the information required in WAC 173-490-200 (7)(c) shall be made if the reduced frequency of monitoring is to continue.

(e) Ecology may approve a part or all of a petition for alternative monitoring requested under WAC 173-490-200 (7)(b) or (c). Approval or disapproval will be in writing and within forty-five calendar days of receipt of the petition by ecology. A failure to approve or disapprove a new petition or petition for renewal within the stated time limit shall be taken as an approval.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-200, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-200, filed 8/20/80.]

WAC 173-490-201 Petroleum liquid storage in external floating roof tanks. (1) Specific applicability.

(a) This section shall apply to all petroleum liquid storage vessels equipped with external floating roofs, having capacities greater than 150,000 liters (40,000 gallons), and as qualified in WAC 173-490-025.

(b) This section does not apply to petroleum liquid storage vessels that:

(i) Are used to store waxy, heavy pour crude oil; or

(ii) Have capacities less than 1,600,000 liters (420,000 gallons) and are used to store produced crude oil and condensate prior to lease custody transfer; or

(iii) Contain a petroleum liquid with a true vapor pressure of less than 10.5 kPa (1.5 psia); or

(iv) Contain a petroleum liquid with a true vapor pressure less than 27.6 kPa (4.0 psia); are of welded construction; and presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or other closure device of demonstrated equivalence approved by ecology; or

(v) Are of welded construction, equipped with a metallic-type shoe primary seal and have secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal).

(2) Provisions for specific processes.

(a) No owner(s) or operator(s) of a petroleum liquid storage vessel shall store a petroleum liquid in that vessel unless:

(i) The vessel has been fitted with:

(A) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or

(B) A closure or other device which controls VOC emissions with an effectiveness equal to or greater than a seal required under WAC 173-490-201 (2)(a)(i)(A) and approved by ecology.

(ii) All seal closure devices meet the following requirements:

(A) There are no visible holes, tears, or other openings in the seal or seal fabric;

(B) The seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and

(C) For vapor mounted primary seals, the accumulated area of gaps exceeding 0.32 cm (1/8 inch) in width between the secondary seal and the tank wall shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 $in.^2$ per foot of tank diameter), as determined by the method in WAC 173-490-201(3).

(iii) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:

(A) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

(B) Equipped with projections into the tank which remain below the liquid surface at all times.

(iv) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(v) Rim vents are set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and

(vi) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least ninety percent of the area of the opening.

(b) The owner(s) or operator(s) of a petroleum liquid storage vessel with an external floating roof subject to this chapter shall:

(i) Perform routine inspections annually in order to insure compliance with WAC 173-490-201 (2)(a) and the inspection shall include a visual inspection of the secondary seal gap;

(ii) Measure the secondary seal gap annually in accordance with WAC 173-490-201(3) when the floating roof is equipped with a vapor-mounted primary seal; and

(iii) Maintain records of the types of volatile petroleum liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed in WAC 173-490-201 (2)(b)(i) and (ii).

(c) The owner(s) or operator(s) of a petroleum liquid storage vessel with an external floating roof exempted from this chapter by WAC 173-490-201 (1)(b)(iii), but containing a petroleum liquid with a true vapor pressure greater than 7.0 kPa (1.0 psi), shall maintain records of the average monthly storage temperature, the type of liquid, and the maximum true vapor pressure for all petroleum liquids with a true vapor pressure greater than 7.0 kPa.

(d) Copies of all records under WAC 173-490-201 (2)(b) and (c) shall be retained by the owner(s) or operator(s) for a minimum of two years after the date on which the record was made.

(e) Copies of all records required under WAC 173-490-201 shall immediately be made available to the director, upon verbal or written request, at any reasonable time.

(3) Testing and monitoring.

(a) The owner or operator of a storage vessel covered under WAC 173-490-201 shall demonstrate compliance by the methods of this subsection or an alternative method approved by ecology.

(b) A person proposing to measure the seal fit of a storage vessel in order to comply with this section shall notify ecology of the intent to measure not less than five working days before the measurement so the director or a representative may observe the measurement if desired.

(c) Compliance with WAC 173-490-201 (2)(a)(ii)(C) shall be determined by physically measuring the length and width of all gaps around the circumference of the secondary seal in each place where a 0.32 cm (1/8 in.) diameter probe passes freely (without forcing or binding against the seal) between the seal and the tank wall and summing the area of the individual gaps.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-201, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-201, filed 8/20/80.]

WAC 173-490-202 Leaks from gasoline transport tanks and vapor collection systems. (1) Specific applicability.

This section shall apply to all gasoline transport tanks equipped for gasoline vapor collection and all vapor collection systems at gasoline loading terminals, bulk gasoline plants and gasoline dispensing facilities as qualified in WAC 173-490-025 and 173-490-040.

(2) Provisions for specific processes.

(a) The owner(s) or operator(s) of a gasoline loading or unloading facility shall only allow the transfer of gasoline between the facility and a transport tank when a current leak test certification for the transport tank is on file with the facility or a valid inspection sticker is displayed on the vehicle.

(b) The owner(s) or operator(s) of a transport tank shall not make any connection to the tank for the purpose of loading or unloading gasoline, except in the case of an emergency, unless the gasoline transport tank:

(i) Is tested annually according to the test procedure referenced in WAC 173-490-202 (3)(c);

(ii) Sustains a pressure change of no more than 0.75 kilopascals (3 inches of water) in five minutes when pressurized to a gauge pressure of 4.5 kilopascals (18 inches of water) or evacuated to a gauge pressure of 1.5 kilopascals (6 inches of water) during the testing required in WAC 173-490-202 (2)(b)(i);

(iii) Is repaired by the owner(s) or operator(s) and retested within fifteen days of testing if it does not meet the criteria of WAC 173-490-202 (2)(b)(ii);

(c) The owner(s) or operator(s) of a transport tank shall:

(i) Have a current leak test certification for the transport tank on file with each gasoline loading or unloading facility where gasoline is transferred; or

(ii) Display a sticker near the department of transportation certification plate required by 49 CFR 178.340-10b which:

(A) Shows the date that the gasoline tank truck last passed the test required in WAC 173-490-202 (2)(b)(i) and (ii);

(B) Shows the identification number of the gasoline tank truck tank; and

(C) Expires not more than one year from the date of the leak tight test.

(d) The owner(s) or operator(s) of a vapor collection system shall:

(i) Operate the vapor collection system and the gasoline loading equipment during all loadings and unloadings of transport tanks equipped for emission control such that:

(A) A gauge reading of tank pressure will not exceed 4.5 kilopascals (18 inches of water) or vacuum 1.5 kilopascals (6 inches of water);

(B) The concentration of gasoline vapors is below the lower explosive limit (LEL, measured as propane) at all points a distance of 2.5 cm (1 inch) from potential leak sources when measured by the method in WAC 173-490-202(3); and

(C) There are no visible liquid leaks.

(ii) Repair and retest a vapor collection system that exceeds the limits of WAC 173-490-202 (2)(d)(i) within fifteen days.

(e) Ecology may, at any time, monitor a gasoline transport tank and vapor collection system during loading or unloading operations by the procedure in WAC 173-490-202 (3)(d) to confirm continuing compliance with WAC 173-490-202 (2)(b) or (d).

(3) Testing and monitoring.

(a) The owner(s) or operator(s) of a gasoline transport tank or vapor collection system shall, at his own expense, demonstrate compliance with WAC 173-490-202 (2)(a) and

(b), respectively. All tests shall be made by, or under the direction of, a person qualified to perform the tests.

(b) The owner(s) or operator(s) of a gasoline transport tank shall notify ecology in writing of the date and location of a certification test at least ten calendar days before the anticipated test date.

(c) To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(d) Monitoring to confirm the continuing existence of leak tight conditions shall be consistent with the procedures on file with and approved by ecology.

(4) Recordkeeping.

(a) The owner(s) or operator(s) of a gasoline transport tank or vapor collection system shall maintain records of all certification tests and repairs for at least two years after the test or repair is completed.

(b) The records of certification tests required by WAC 173-490-202 (4)(a) shall, as a minimum, contain:

(i) The transport tank identification number;

(ii) The initial test pressure and the time of the reading;

(iii) The final test pressure and the time of the reading;

(iv) The initial test vacuum and the time of the reading;

(v) The final test vacuum and the time of the reading;

(vi) At the top of each report page, the company name, date and location of the tests on that page; and

(vii) Name and title of the person conducting the test.

(c) The owner(s) or operator(s) of a gasoline transport tank shall annually certify that the transport tank passed the required tests.

(d) Copies of all records required under WAC 173-490-202 shall immediately be made available to ecology, upon written request, at any reasonable time.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-202, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-202, filed 8/20/80.]

WAC 173-490-204 Graphic arts systems. (1) Specific applicability.

(a) This section shall apply to all packaging rotogravure, publication rotogravure, specialty printing operations, and flexographic printing facilities that use more than 90 megagrams (100 tons) per year of VOCs as a component of ink, for the thinning of ink, cleaning of presses, press components and equipment; and are covered by WAC 173-490-025.

(b) Machines that have both coating units (apply a uniform layer of material across the entire width of a web) and printing units (forming words, designs, and pictures) shall be included under WAC 173-490-204 rather than WAC 173-490-040(6), Surface coaters.

(2) Provisions for specific processes.

(a) No owner(s) or operator(s) of a packaging rotogravure, publication rotogravure or flexographic printing subject to this regulation and employing solvent containing ink may operate, cause, allow or permit the operation of the facility unless:

(i) The volatile fraction of ink, as it is applied to the substrate, contains twenty-five percent by volume or less of organic solvent and seventy-five percent by volume or more of water;

(ii) The ink as it is applied to the substrate, less water, contains sixty percent by volume or more nonvolatile material; or

(iii) The owner(s) or operator(s) installs and operates a system that captures at least ninety percent by weight and;

(A) A carbon adsorption system which reduces the volatile organic emissions from the capture system by at least ninety percent by weight;

(B) An incineration system which oxidizes at least ninety percent of the nonmethane VOCs (VOC measured as total combustible carbon) to carbon dioxide and water; or

(C) An alternative VOC emission reduction system demonstrated to have at least a ninety percent reduction efficiency, measured across the control system, and has been approved by ecology.

(b) A collection system shall be used with the emission controls of WAC 173-490-204 (2)(a)(iii). The design and operation of the collection system shall be consistent with good engineering practice, and shall provide an overall reduction in the emission of VOCs of at least:

(i) Seventy-five percent where a publication rotogravure process is used; or

(ii) Sixty-five percent where a packaging rotogravure process is used; or

(iii) Sixty percent where a flexographic process is used.

(3) Testing and monitoring.

(a) To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(b) When add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:

(i) Exhaust gas temperature of all incinerators;

(ii) Temperature rise across a catalytic incinerator bed;

(iii) Breakthrough of VOC on a carbon adsorption unit; and

(iv) Any other continuous monitoring or recording device required by ecology.

(c) The owner or operator of a facility shall be responsible for all expenses of monitoring required by WAC 173-490-204 (3)(b).

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-204, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-204, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-204, filed 8/20/80.]

WAC 173-490-205 Surface coating of miscellaneous metal parts and products. (1) Specific applicability. This section shall apply to surface coating of miscellaneous metal parts and products in the following industries, if the potential uncontrolled emissions of VOC is greater than 10 tons per year and as qualified in WAC 173-490-205(1)(b),(c), and (d), and 173-490-025.

(a) Miscellaneous metal parts and products shall include:

(i) Large farm machinery (harvesting, fertilizing and planting machines, tractors, combines, etc.);

(ii) Small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.);

(iii) Small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.);

(iv) Commercial machinery (office equipment, computers and auxiliary equipment, typewriters, calculators, vending machines, etc.);

(v) Industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.);

(vi) Fabricated metal products (metal covered doors, frames, etc.); and

(vii) Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (nonelectric machinery), Major Group 36 (electrical machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), Major Group 39 (miscellaneous manufacturing industries), Major Group 40 (railroad transportation), and Major Group 41 (transit passenger transportation).

(b) This section is not applicable to the surface coating of the following metal parts and products:

(i) Automobiles and light-duty trucks;

(ii) Metal cans;

(iii) Flat metal sheets and strips in the form of rolls or coils;

(iv) Magnet wire for use in electrical machinery;

(v) Metal furniture;

(vi) Large appliances;

(vii) Airplanes;

(viii) Automobile refinishing;

(ix) Customized top coating of automobiles and trucks, if production is less than thirty-five vehicles per day; and

(x) Exterior of marine vessels.

(c) This chapter applies to the application area, flashoff area, air and forced air drier, and oven used in the surface coating of the metal parts and products in WAC 173-490-205 (1)(a). This chapter also applies to prime coat, top coat, and single coat operations.

(d) The application of coatings whose formulations are controlled by federal specifications and the use of which is required by federal agencies shall be exempt from the emission limits in WAC 173-490-205 (2)(a).

(e) A case-by-case determination of the emission controls best representing RACT may be substituted for the requirements of WAC 173-490-205(2). Such a determination shall be approved by ecology.

(2) Provisions for specific processes.

(a) The owner or operator of a coating application system shall not emit a quantity of VOCs greater than those listed by specific coating, excluding water and as delivered to the application system:

(i)	Clear coatings	0.52 kg/liter	(4.3 lb/gallon)
(ii)	Extreme performance coatings	0.42 kg/liter	(3.5 lb/gallon)
(iii)	Air dried coatings	0.42 kg/liter	(3.5 lb/gallon)
(iv)	All others	0.36 kg/liter	(3.0 lb/gallon)
(v)	Powder coatings	0.05 kg/liter	(0.4 lb/gallon)

(b) When more than one emission limitation listed in WAC 173-490-205 (2)(a) applies to a specific coating, the least stringent will apply.

(c) All VOC emissions from solvent washings shall be considered in the emission limitations in WAC 173-490-205 (2)(a), unless the solvent is directed into containers that prevent evaporation into the atmosphere.

(d) The emission limits set forth in WAC 173-490-205 (2)(a) shall be achieved by:

(i) The application of low solvent coating technology; or

(ii) An incineration system that oxidizes at least ninety percent of the VOCs (VOC measured as total combustible carbon) to carbon dioxide and water; or

(iii) An equivalent means of VOC reduction certified by the owner(s) or operator(s) and approved by ecology.

(e) A collection system shall be used together with the incinerator of WAC 173-490-205 (2)(d)(ii). The design and operation of the collection system shall be consistent with good engineering practice and provide for an overall VOC emission reduction necessary to comply with the emission limits of WAC 173-490-205 (2)(a). The required VOC emission reduction shall be calculated on a unit volume of uncured solids basis.

(3) Testing and monitoring.

(a) Ecology may require the owner(s) or operator(s) of a source to demonstrate at his/her own expense, compliance by the methods of WAC 173-490-205 (3)(c).

(b) The owner(s) or operator(s) of a source shall notify ecology at least ten days before a proposed emission certification test so the director or a representative may observe the test.

(c) To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(d) Ecology may require monitoring of the following parameters:

(i) Exhaust gas temperature of all incinerators;

(ii) Temperature rise across a catalytic incinerator bed; and

(iii) Breakthrough of VOC on a carbon adsorption unit.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-205, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-205, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-205, filed 8/20/80.]

WAC 173-490-207 Surface coating of flatwood paneling. (1) Specific applicability.

(a) This section shall apply to all flatwood panel manufacturers and surface finishing facilities as qualified in WAC 173-490-207 (1)(b) and (c) and 173-490-025.

(b) These chapters shall apply to all operations and equipment that is used to apply, convey and dry (including flashoff areas) a surface pattern or coating on the following products:

(i) Printed interior panels made of hardwood plywood and thin particleboard;

(ii) Natural finish hardwood plywood panels; or

(iii) Hardboard paneling with Class II finishes.

(c) These chapters do not apply to the manufacture of exterior siding, tileboard, or particleboard used as a furniture component.

(2) Provisions for specific processes.

(a) The owner(s) or operator(s) of a facility shall not emit VOCs from a coating application system in excess of:

(i) 2.9 kg per 100 square meters of coated finished product (6.0 lb/1,000 square feet) from printed interior panels, regardless of the number of coats applied;

(ii) 5.9 kg per 100 square meters of coated finished product (12.0 lb/1,000 square feet) from natural finish hardwood plywood panels, regardless of the number of coats applied; and

(iii) 4.9 kg per 100 square meters of coated finished product (10.0 lb/1,000 square feet) from Class II finishes on hardboard panels, regardless of the number of coats applied.

(b) The emission limits in WAC 173-490-207 (2)(a) shall be achieved by:

(i) The application of low solvent content coating technology; or

(ii) An incineration system which oxidizes at least ninety percent of the nonmethane VOCs entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or

(iii) An equivalent means of VOC removal. The equivalent means must be certified by the owner(s) or operator(s) and approved by ecology.

(c) A capture system shall be used in conjunction with the emission control systems in WAC 173-490-207 (2)(b)(ii) and (iii). The design and operation of the capture system must be consistent with good engineering practice and shall be required to provide for an overall emission reduction sufficient to meet the emission limitation in WAC 173-490-207 (2)(a).

(3) Testing and monitoring.

(a) Ecology may require the owner or operator of a facility to demonstrate at his/her own expense compliance by the methods of WAC 173-490-207 (3)(c).

(b) The owner(s) or operator(s) of a facility shall notify ecology at least ten days before a proposed emission certification test so the director or a representative may observe the test.

(c) To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(d) Ecology may require monitoring of the following parameters:

(i) Exhaust gas temperature of all incinerators;

(ii) Temperature rise across a catalytic incinerator bed; and

(iii) Breakthrough of VOC on a carbon adsorption unit.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-207, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-207, filed 8/20/80.]

WAC 173-490-208 Aerospace assembly and component coating operations. (1) Specific applicability. This section shall apply to all aerospace component coating facilities that emit an annual average of eighteen kilograms (forty pounds) or more of VOCs per operating day and as qualified in WAC 173-490-025.

(2) It shall be unlawful for any person to cause or allow:

(a) The application of any primer or topcoat to aerospace components which contains in excess of:

(i) 650 grams of VOC per liter of primer, less water, as applied.

(ii) 600 grams of VOC per liter of topcoat, less water, as applied.

(b) The application of any temporary protective coating to aerospace components that contains more than 250 grams of VOC per liter of material, less water, as applied.

(c) The use of VOCs of composite vapor pressure of 10.4 kPa (1.5 psia) or greater at a temperature of 21.1°C (70°F) for surface preparation or cleanup, excluding paint removal.

(d) The use of VOCs for the cleanup of spray equipment used in aerospace component coating operations unless 85 percent of the VOCs by weight, are collected and disposed so that they are not emitted to the atmosphere.

(e) The use of a stripper which contains more than 400 grams of VOC per liter or has a composite vapor pressure of VOCs more than 1.3 kPa (0.19 psia) at 21.1°C (70°F).

(3) The emission limits of paragraph (2) shall be achieved by:

(a) The application of reasonably available low solvent coating technology;

(b) A vapor collection and disposal system; or

(c) An equivalent method of VOC reduction certified by the owner(s) or operator(s) and approved by ecology.

(4) The provisions of WAC 173-490-208 (2)(a) and (2)(b) shall not apply to the following materials:

(a) Coatings for masking in chemical etching operations,

(b) Adhesive bonding primer,

(c) Flight test coatings,

(d) Space vehicle coatings, or

(e) Fuel tank coatings.

(5) Upon the submission of an alternative coating evaluation, ecology may determine that a reasonably available low solvent coating does exist for a given application and may exempt the coating from requirements of WAC 173-490-208. All alternative coating evaluations shall contain, as a minimum:

(a) Types of products to be coated,

(b) Types of coatings evaluated,

(c) Results of performance tests,

(d) Status of research into development of low VOC coatings for the application,

(e) Feasibility of installing control equipment,

(f) Mitigating measures that could be implemented to reduce VOC emissions.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-208, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-208, filed 7/27/82.]

Chapter 173-491 WAC

EMISSION STANDARDS AND CONTROLS FOR SOURCES EMITTING GASOLINE VAPORS

WAC

WAC 173-491-010 Policy and purpose. (1) It is the policy of the department of ecology (ecology) under the authority vested in it by chapters 43.21A and 70.94 RCW to provide for the systematic control of air pollution from air contaminant sources and for the proper development of the state's natural resources.

(2) It is the purpose of this chapter to establish standards for the control of air contaminants emitted from gasoline marketing sources.

[Statutory Authority: RCW 70.94.331. 91-14-101 (Order 90-63), § 173-491-010, filed 7/2/91, effective 8/2/91.]

WAC 173-491-015 Applicability. This chapter shall apply to gasoline marketing operations, including the storage, transport, and transfer of gasoline, including the transfer from storage tanks into transport tanks, and from storage tanks into motor vehicles.

[Statutory Authority: RCW 70.94.165. 98-01-184 (Order 97-07), § 173-491-015, filed 12/23/97, effective 1/23/98. Statutory Authority: RCW 70.94.331. 91-14-101 (Order 90-63), § 173-491-015, filed 7/2/91, effective 8/2/91.]

WAC 173-491-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are by this reference incorporated into this chapter. Unless a different meaning is clearly required by context, the following words and phrases, as used in this chapter, shall have the following meanings:

(1) "Bottom loading" means the filling of a tank through a line entering the bottom of the tank.

(2) "Bulk gasoline plant" means a gasoline storage and transfer facility that receives more than ninety percent of its annual gasoline throughput by transport tank, and reloads gasoline into transport tanks.

(3) "Canister capture rate" means canister effectiveness times the percent of light duty vehicles that have onboard vapor recovery systems.

(4) "Canister effectiveness" means the percent of refueling vapors recovered by a representative onboard vapor recovery system.

(5) "Centroid" means the geometric center of a gas pump or a bank of gas pumps or, if a station has more than one bank of pumps, the geometric center of each bank of pumps.

(6) "Certified vapor recovery system" means a vapor recovery system which has been certified by the department of ecology. Only Stage II vapor recovery systems with a single coaxial hose can be certified. The department may certify vapor recovery systems certified by the California Air Resources Board as of the effective date of the regulation.

(7) "Eastern Washington county" means the following counties: Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman, and Yakima.

(8) "Gasoline" means a petroleum distillate which is a liquid at standard conditions and has a true vapor pressure greater than four pounds per square inch absolute at twenty degrees C, and is used as a fuel for internal combustion engines. Also any liquid sold as a vehicle fuel with a true vapor pressure greater than four pounds per square inch absolute at twenty degrees C shall be considered "gasoline" for purpose of this regulation.

(9) "Gasoline dispensing facility" means any site dispensing gasoline into motor vehicle fuel tanks from stationary storage tanks.

(10) "Gasoline loading terminal" means a gasoline transfer facility that receives more than ten percent of its annual gasoline throughput solely or in combination by pipeline, ship or barge, and loads gasoline into transport tanks.

(11) "Leak free" means a liquid leak of less than four drops per minute.

(12) "Modified" means any physical change in, or change in the method of operation of, a gasoline dispensing facility that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted. The term modified shall be construed consistent with the definitions of modification in Section 7411, Title 42, United States Code, and with rules implementing that section. Section 7411 exempts changes in gasoline throughput not resulting directly from a physical change.

(13) "NAAQS" means the National Ambient Air Quality Standard.

(14) "Ozone-contributing county" means a county in which the emissions have contributed to the formation of ozone in any county or area where violations of federal ozone standards have been measured, and includes: Cowlitz, Island, Kitsap, Lewis, Skagit, Thurston, Wahkiakum, and Whatcom counties.

(15) "Permanent residence" means a single-family or multi-family dwelling, or any other facility designed for use as permanent housing.

(16) "Stage I" means gasoline vapor recovery during all gasoline marketing transfer operations except motor vehicle refueling.

(17) "Stage II" means gasoline vapor recovery during motor vehicle refueling operations from stationary tanks.

(18) "Submerged fill line" means any discharge pipe or nozzle which meets either of the following conditions:

- Where the tank is filled from the top, the end of the discharge pipe or nozzle must be totally submerged when the liquid level is six inches from the bottom of the tank, or;
- Where the tank is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is eighteen inches from the bottom of the tank.

(19) "Submerged loading" means the filling of a tank with a submerged fill line.

(20) "Throughput" means the amount of material passing through a facility.

(21) "Top off" means to attempt to dispense gasoline to a motor vehicle fuel tank after a vapor recovery dispensing nozzle has shut off automatically.

(22) "Transport tank" means a container used for shipping gasoline over roadways.

(23) "True vapor pressure" means the equilibrium partial pressure of a petroleum liquid as determined by methods described in American Petroleum Institute Bulletin 2517, 1980.

(24) "Vapor balance system" means a system consisting of the transport tank, gasoline vapor transfer lines, storage

tank, and all tank vents designed to route displaced gasoline vapors from a tank being filled with liquid gasoline.

(25) "Vapor collection system" means a closed system to conduct vapors displaced from a tank being filled into the tank being emptied, a vapor holding tank, or a vapor control system.

(26) "Vapor control system" means a system designed and operated to reduce or limit the emission of gasoline vapors emission into the ambient air.

(27) "Vapor tight" means a leak of less than one hundred percent of the lower explosive limit on a combustible gas detector measured at a distance of one inch from the source or no visible evidence of air entrainment in the sight glasses of liquid delivery hoses.

[Statutory Authority: RCW 70.94.165. 98-01-184 (Order 97-07), § 173-491-020, filed 12/23/97, effective 1/23/98. Statutory Authority: 1996 c 294. 97-04-012 (Order 95-15), § 173-491-020, filed 1/27/97, effective 2/27/97. Statutory Authority: RCW 70.94.331. 93-13-011 (Order 92-47), § 173-491-020, filed 6/7/93, effective 7/8/93; 91-14-101 (Order 90-63), § 173-491-020, filed 7/2/91, effective 8/2/91.]

WAC 173-491-030 Registration. (1) The owner or operator of a gasoline loading terminal, bulk gasoline plant, or gasoline dispensing facility subject to the provisions of WAC 173-491-040 (2) through (5) shall register annually the facility with ecology or local air authority. Annual registration shall be made by the owner or operator on a form provided by ecology or local air authority within sixty days of receipt of the form. Such registration form shall require information relevant to determining whether the facility is in compliance with the requirements of this chapter and be accompanied by the following fee: Gasoline loading terminals five hundred dollars, bulk gasoline plants two hundred dollars, gasoline dispensing facilities one hundred dollars, or a greater amount duly adopted by a local air pollution authority. The amount of the fees collected shall only be used to administer the registration program for facilities subject to this chapter.

(2) Administration of the registration program shall include:

(a) Initial registration and annual or other periodic reports from the source owner providing information directly related to air pollution registration.

(b) On-site inspections necessary to verify compliance with registration requirements.

(c) Data storage and retrieval systems necessary for support of the registration program.

(d) Emission inventory reports and emission reduction credits computed from information provided by sources pursuant to registration.

(e) Staff review, including engineering analysis for accuracy and currentness, of information provided by sources pursuant to registration program requirements.

(f) Clerical and other office support provided in direct furtherance of the registration program.

(g) Administrative support provided in directly carrying out the registration program.

(3) Ecology or local air authority will provide a written verification of registration to owners or operators of facilities subject to the provisions of WAC 173-491-040 (2) through (5). Such verification shall be available for inspection by ecology or local air authority personnel during normal business hours.

(4) The owner or operator of a gasoline loading terminal or a gasoline dispensing facility shall maintain total annual gasoline throughput records for the most recent two calendar years. Such records shall be available for inspection by ecology or local air authority personnel during normal business hours.

[Statutory Authority: RCW 70.94.331. 91-14-101 (Order 90-63), § 173-491-030, filed 7/2/91, effective 8/2/91.]

WAC 173-491-040 Gasoline vapor control requirements. (1) Fixed-roof gasoline storage tanks.

(a) All fixed-roof gasoline storage tanks having a nominal capacity greater than forty thousand gallons shall comply with one of the following:

(i) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources - Storage Vessels for Petroleum Liquids (40 CFR 60, subparts K, KA and KB).

(ii) Be retrofitted with a floating roof or internal floating cover using a metallic seal or a nonmetallic resilient seal at least meeting the equipment specifications of the federal standards referred to in (a)(i) of this subsection or its equivalent.

(iii) Be fitted with a floating roof or internal floating cover meeting the manufacturer's equipment specifications in effect when it was installed.

(b) All seals used in (a)(ii) and (iii) of this subsection are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears, or other openings.

(c) All openings not related to safety are to be sealed with suitable closures.

(d) Tanks used for the storage of gasoline in bulk gasoline plants and equipped with vapor balance systems as required in subsection (3)(b) of this section shall be exempt from the requirements of subsection (1) of this section.

(2) Gasoline loading terminals.

(a) This chapter shall apply to all gasoline loading terminals with an average annual gasoline throughput greater than 7.2 million gallons.

(b) Loading facilities. Facilities for the purpose of loading gasoline into any transport tank shall be equipped with a vapor control system (VCS) as described in (c) of this subsection and comply with the following conditions:

(i) The loading facility shall employ submerged or bottom loading for all transport tanks.

(ii) The VCS shall be connected during the entire loading of all transport tanks.

(iii) The loading of all transport tanks shall be performed such that the transfer is at all times vapor tight. Emissions from pressure relief valves shall not be included in the controlled emissions when the back pressure in the VRS collection lines is lower than the relief pressure setting of the transport tank's relief valves.

(iv) All loading lines and vapor lines shall be equipped to close automatically when disconnected. The point of closure shall be on the tank side of any hose or intermediate connecting line.

(c) Vapor control system (VCS). The VCS shall be designed and built according to accepted industrial practices and meet the following conditions:

(i) The VCS shall not allow organic vapors emitted to the ambient air to exceed thirty-five milligrams per liter (three hundred twenty-two milligrams per gallon) of gasoline loaded.

(ii) The VCS shall be equipped with a device to monitor the system while the VCS is in operation.

(iii) The back pressure in the VCS collection lines shall not exceed the transport tank's pressure relief settings.

(3) Bulk gasoline plants.

(a) This section shall apply to all bulk gasoline plants with an average annual gasoline throughput greater than 7.2 million gallons.

(b) Deliveries to bulk gasoline plant storage tanks.

(i) The owner or operator of a bulk gasoline plant shall not permit the loading of gasoline into a storage tank equipped with vapor balance fittings unless the vapor balance system is attached to the transport tank and operated properly. The vapor balance system shall prevent at least ninety percent of the displaced gasoline vapors from entering the ambient air. A vapor balance system that is designed, built, and operated according to accepted industrial practices will satisfy this requirement.

(ii) Storage tank requirements. All storage tanks with a nominal capacity greater than five hundred fifty gallons and used for the storage of gasoline shall comply with the following conditions:

(A) Each storage tank shall be equipped with a submerged fill line.

(B) Each storage tank shall be equipped for vapor balancing of gasoline vapors with transport tanks during gasoline transfer operations.

(C) The vapor line fittings on the storage tank side of break points with the transport tank vapor connection pipe or hose shall be equipped to close automatically when disconnected.

(D) The pressure relief valves on storage tanks shall be set at the highest possible pressure consistent with local and state codes for fire and safety but in no case greater than ninety percent of the tank's safe working pressure.

(iii) Transport tank requirements. All transport tanks transferring gasoline to storage tanks in a bulk gasoline plant shall comply with the following conditions:

(A) The transport tank shall be equipped with the proper attachment fittings to make vapor tight connections for vapor balancing with storage tanks.

(B) The vapor line fittings on the transport tank side of break points with the storage tank connection pipe or hose shall be equipped to close automatically when disconnected.

(C) The pressure relief valves on transport tanks shall be set at the highest possible pressure consistent with local and state codes for fire and safety.

(c) Gasoline transfer operations.

(i) No owner or operator of a bulk gasoline plant or transport tank shall allow the transfer of gasoline between a stationary storage tank and a transport tank except when the following conditions exist:

(A) The transport tanks are being submerged filled or bottom loaded.

(B) The loading of all transport tanks, except those exempted under (c)(ii) of this subsection are being performed using a vapor balance system.

(C) The transport tanks are equipped to balance vapors and maintained in a leak tight condition in accordance with subsection (6) of this section.

(D) The vapor return lines are connected between the transport tank and the stationary storage tank and the vapor balance system is operated properly.

(ii) Transport tanks used for gasoline and meeting the following conditions shall be exempt from the requirement to be equipped with any attachment fitting for vapor balance lines if:

(A) The transport tank is used exclusively for the delivery of gasoline into storage tanks of a facility exempt from the vapor balance requirements of subsection (4) of this section; and the transport tank has a total nominal capacity less than four thousand gallons and is constructed so that it would require the installation of four or more separate vapor balance fittings; or

(B) In eastern Washington counties, a transport tank with a total nominal capacity less than four thousand gallons shall be exempt from the requirement to be fitted with any attachment fitting for vapor balance lines if the transport tank was in use prior to July 1, 1993. Replacement transport tanks or new equipment put into use July 1, 1993, or later are exempt from vapor balance requirements only as specified in (c)(ii)(A) of this subsection.

(4) Gasoline dispensing facilities (Stage I).

(a) This section shall apply to the delivery of gasoline to gasoline dispensing facilities located in ozone nonattainment areas with an annual gasoline throughput greater than two hundred thousand gallons and total storage capacity greater than ten thousand gallons, and to gasoline dispensing facilities located in ozone attainment areas with an annual gasoline throughput greater than three hundred sixty thousand gallons and all new gasoline dispensing facilities with a total gasoline nominal storage capacity greater than ten thousand gallons.

(b) All gasoline storage tanks of the facilities defined in (a) of this subsection shall be equipped with submerged or bottom fill lines and fittings to vapor balance gasoline vapors with the delivery transport tank.

(c) Gasoline storage tanks with offset fill lines shall be exempt from the requirement of (b) of this subsection if installed prior to January 1, 1979.

(d) The owner or operator of a gasoline dispensing facility shall not permit the loading of gasoline into a storage tank equipped with vapor balance fittings from a transport tank equipped with vapor balance fittings unless the vapor balance system is attached to the transport tank and operated satisfactorily.

(5) Gasoline dispensing facilities (Stage II). **Determinations and requirements.** Ecology determines that Stage II vapor recovery systems at gasoline dispensing facilities in Cowlitz and Thurston counties are important to achieving or maintaining the NAAQS for Ozone in Clark and Pierce counties, respectively.

(a) Gasoline dispensing facilities are required to have certified Stage II vapor recovery systems under the following conditions:

(i) By December 31, 1998, all facilities located in an ozone nonattainment or maintenance plan county dispensing greater than six hundred thousand gallons of gasoline annually, except in Kitsap County, all facilities dispensing greater than eight hundred forty thousand gallons annually; and

(ii) All facilities that dispense in excess of one million two hundred thousand gallons of gasoline annually and are located in Thurston or Cowlitz counties. This requirement will end on December 31, 2002, unless ecology determines that Stage II is important to achieving or maintaining the NAAQS for Ozone in a nonattainment or maintenance plan county.

(b) Upon approval of a notice of construction under subsection (4)(e) of this section, Stage II is not required and may be removed from any gasoline dispensing facilities located in Whatcom, Skagit, Island, Lewis, and Wahkiakum counties, and from any gasoline dispensing facility located in Thurston and Cowlitz counties dispensing less than one million two hundred thousand gallons annually.

(c) In addition to subsection (5)(a) of this section, all new and modified gasoline dispensing facilities with an annual gasoline throughput of 1.5 million gallons and above are required to have Stage II gasoline vapor recovery systems if a lot with a permanent residence is within the distance and throughput specifications of Table 1 of this subsection, and as explained in (c)(i) and (ii) of this subsection.

Table 1

Gasoline Throughput (millions of gallons)	Allowable Distance to the Property Line (meters)
1.5	20
2.0	25
4.0	38
6.0	49
8.0	58
10.0	66

(i) When the throughput is not shown in the chart, interpolate to get the distance for that throughput.

(ii) The allowable distance shall be measured from the centroid of the pumps to the nearest point on the property line of the nearest lot on which a permanent residence is located. However, if the permanent residence is located at least twice the allowable distance from the centroid of the pumps, the requirements of (c) of this subsection shall not apply.

(d)(i) Beginning on July 1, 2001, and each year thereafter, the department of ecology shall publish the canister capture rate.

(ii) When the canister capture rate reaches fifteen percent and there are no major exceptions, waivers, or other adjustments to the EPA onboard canister regulations or program implementation, the department of ecology shall revise (c) of this subsection to incorporate the effect of canisters.

(e) The owner or operator of new or modified gasoline dispensing facilities subject to any of the requirements of (a), (b) or (c) of this subsection shall file a notice of construction and obtain the approval of the local air authority prior to commencing construction or modification.

(f) The owner or operator of any gasoline dispensing facility may elect to submit a site-specific analysis of the requirement for a Stage II vapor recovery system under (c) of this subsection and request the department of ecology to evaluate it subject to the fees described in (l) of this subsection. The department of ecology will complete a second tier analysis described under WAC 173-460-090 within forty-five days of determining that the analysis submitted is complete and no additional information is needed. The requirements for gasoline vapor control shall be determined as a result of that process.

(g) Fees. The fee for new source review of a gasoline dispensing facility under this section shall be the same as the fee under WAC 173-400-116 (2)(d)(ii) except, if a site-specific review is elected under (f) of this subsection, the fee shall be the same as the fee under WAC 173-400-116 (3)(c) for a tier two analysis.

(h) This section shall apply to the refueling of motor vehicles from stationary tanks at gasoline dispensing facilities located in Washington.

(i) All gasoline dispensing facilities subject to this section shall be equipped with a certified Stage II vapor recovery system.

(j) The owner or operator of a gasoline dispensing facility subject to this section shall not transfer or allow the transfer of gasoline from stationary tanks into motor vehicle fuel tanks unless a certified Stage II vapor recovery system is used.

(k) All Stage II vapor recovery equipment shall be installed in accordance with the system's certification requirements and shall be maintained to be leak free, vapor tight, and in good working order.

(l) Whenever a Stage II vapor recovery system component is determined to be defective, the owner or operator shall take the system out of service until it has been repaired, replaced, or adjusted, as necessary.

(m) The owner or operator of each gasoline dispensing facility utilizing a Stage II system shall conspicuously post operating instructions for the system in the gasoline dispensing area. The instructions shall clearly describe how to fuel vehicles correctly using the vapor recovery nozzles and include a warning against topping off. Additionally, the instructions shall include a prominent display of ecology's toll free telephone number for complaints regarding the operation and condition of the vapor recovery nozzles.

(6) Equipment or systems failures.

(a) Specific applicability. This section shall apply to all gasoline transport tanks equipped for gasoline vapor collection and all vapor collection systems at gasoline loading terminals, bulk gasoline plants, and gasoline dispensing facilities as described in subsections (2) through (5) of this section.

During the months of May, June, July, August, and September any failure of a vapor collection system at a bulk gasoline plant or gasoline loading terminal to comply with this section requires the discontinuation of gasoline transfer operations for the failed part of the system. Other transfer points that can continue to operate in compliance may be used. The loading or unloading of the transport tank connected to the

failed part of the vapor collection system may be completed during the other months of the year.

(b) Provisions for specific processes.

(i) The owner or operator of a gasoline loading terminal or bulk gasoline plant shall only allow the transfer of gasoline between the facility and a transport tank if a current leak test certification for the transport tank is on file with the facility or a valid inspection sticker is displayed on the vehicle. Certification is required annually.

(ii) The owner or operator of a transport tank shall not make any connection to the tank for the purpose of loading or unloading gasoline, except in the case of an emergency, unless the gasoline transport tank has successfully completed the annual certification testing requirements in (c) of this subsection, and such certification is confirmed either by:

(A) Have on file with each gasoline loading or unloading facility at which gasoline is transferred a current leak test certification for the transport tank; or

(B) Display a sticker near the department of transportation certification plate required by 49 CFR 178.340-10b which:

(I) Shows the date that the gasoline tank truck last passed the test required in (c) of this subsection;

(II) Shows the identification number of the gasoline tank truck tank; and

(III) Expires not more than one year from the date of the leak tight test.

(iii) The owner or operator of a vapor collection system shall:

(A) Operate the vapor collection system and the gasoline loading equipment during all loadings and unloadings of transport tanks equipped for emission control such that:

(I) The tank pressure will not exceed a pressure of eighteen inches of water or a vacuum of six inches of water;

(II) The concentration of gasoline vapors is below the lower explosive limit (LEL, measured as propane) at all points a distance of one inch from potential leak sources; and

(III) There are no visible liquid leaks except for a liquid leak of less than four drops per minute at the product loading connection during delivery.

(IV) Upon disconnecting transfer fittings, liquid leaks do not exceed ten milliliters (0.34 fluid ounces) per disconnect averaged over three disconnects.

(B) Repair and retest a vapor collection system that exceeds the limits of (b)(iii)(A) of this subsection within fifteen days.

(iv) The department or local air authority may, at any time, monitor a gasoline transport tank and vapor collection system during loading or unloading operations by the procedure in (c) of this subsection to confirm continuing compliance with this section.

(c) Testing and monitoring.

(i) The owner or operator of a gasoline transport tank or vapor collection system shall, at his own expense, demonstrate compliance with (a) and (b) of this subsection, respectively. All tests shall be made by, or under the direction of, a person qualified to perform the tests and approved by the department.

(ii) Testing to determine compliance with this section shall use procedures approved by the department.

(iii) Monitoring to confirm continuing leak tight conditions shall use procedures approved by the department.

(d) Recordkeeping.

(i) The owner or operator of a gasoline transport tank or vapor collection system shall maintain records of all certification tests and repairs for at least two years after the test or repair is completed.

(ii) The records of certification tests required by this section shall, as a minimum, contain:

(A) The transport tank identification number;

(B) The initial test pressure and the time of the reading;

(C) The final test pressure and the time of the reading;

(D) The initial test vacuum and the time of the reading;

(E) The final test vacuum and the time of the reading;

(F) At the top of each report page the company name, date, and location of the tests on that page; and

(G) Name and title of the person conducting the test.

(iii) The owner or operator of a gasoline transport tank shall annually certify that the transport tank passed the required tests.

(iv) Copies of all records required under this section shall immediately be made available to the department, upon written request, at any reasonable time.

(e) Preventing evaporation. All persons shall take reasonable measures to prevent the spilling, discarding in sewers, storing in open containers, or handling of gasoline in a manner that will result in evaporation to the ambient air.

[Statutory Authority: RCW 70.94.165. 98-01-184 (Order 97-07), § 173-491-040, filed 12/23/97, effective 1/23/98. Statutory Authority: 1996 c 294. 97-04-012 (Order 95-15), § 173-491-040, filed 1/27/97, effective 2/27/97. Statutory Authority: RCW 70.94.331. 93-13-011 (Order 92-47), § 173-491-040, filed 6/7/93, effective 7/8/93; 91-14-101 (Order 90-63), § 173-491-040, filed 7/2/91, effective 8/2/91.]

WAC 173-491-050 Reserved.

[Statutory Authority: 1996 c 294. 97-04-012 (Order 95-15), § 173-491-050, filed 1/27/97, effective 2/27/97. Statutory Authority: RCW 70.94.331. 93-13-068 (Order 92-47), § 173-491-050, filed 6/17/93, effective 7/18/93; 93-03-089 (Order 92-42), § 173-491-050, filed 1/20/93, effective 2/20/93; 91-14-101 (Order 90-63), § 173-491-050, filed 7/2/91, effective 8/2/91.]

Chapter 173-492 WAC

MOTOR FUEL SPECIFICATIONS FOR OXYGENATED GASOLINE

WAC

WAC 173-492-010 Policy and purpose. The purpose of this regulation is to reduce carbon monoxide emissions from gasoline powered motor vehicles, through the wintertime use of oxygenated gasolines.

[Statutory Authority: RCW 70.94 and section 211(m) of the Federal Clean Air Act. 96-19-094 (Order 96-03), § 173-492-010, filed 9/18/96, effective 10/19/96. Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545

Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-010, filed 11/30/92, effective 12/1/92.]

WAC 173-492-020 Applicability. This regulation shall apply to all gasoline offered for sale in the control areas and over the control periods defined in WAC 173-492-070.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-020, filed 11/30/92, effective 12/1/92.]

WAC 173-492-030 Definitions. The following words and phrases shall have the following meanings:

"Authority" means an air pollution control authority activated pursuant to chapter 70.94 RCW that has jurisdiction over the subject source.

"Blender" means a person who owns oxygenated gasoline which is sold or dispensed from an oxygenate blending facility for use in a control area during a control period.

"Control area" means an area in which only oxygenated gasoline under the oxygenated gasoline program of this chapter may be sold or dispensed. Each control area is a county or group of counties administered by a separate air pollution control authority.

"Control period" means the period during which oxygenated gasoline must be sold or dispensed within the control area.

"Ecology" means the Washington state department of ecology.

"Gasoline" means any fuel sold for use in motor vehicles and motor vehicle engines, and commonly known or sold as gasoline.

"Large volume blender" means blenders that blend and offer for sale or sell one million gallons or more, but less than fifteen million gallons, of oxygenated gasoline per month on average during a control period within a control area.

"Medium volume blender" means blenders that blend and offer for sale or sell one hundred thousand gallons or more, but less than one million gallons, of oxygenated gasoline per month on average during a control period within a control area.

"Oxygenate" means any substance which, when added to gasoline, increases the amount of oxygen in the gasoline blend. Lawful use of any combination of these substances requires that they be "substantially similar" under section 211 (f)(1) of the federal Clean Air Act (CAA), or be permitted under a waiver granted by the Administrator of the Environmental Protection Agency under the authority of section 211 (f)(4) of the CAA.

"Oxygenated gasoline" means gasoline which contains a measurable amount of oxygenate, generally an alcohol or ether.

"Small volume blender" means blenders that blend and offer for sale or sell less than one hundred thousand gallons of oxygenated gasoline per month on average during a control period within a control area.

"Very large volume blender" means blenders that blend and offer for sale or sell fifteen million gallons or more of oxygenated gasoline per month on average during a control period within a control area.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-030, filed 11/30/92, effective 12/1/92.]

WAC 173-492-040 Compliance requirements. (1) Retail sales. No gasoline intended as a final product for fueling of motor vehicles within the control areas and control periods as defined in WAC 173-492-070 shall be offered for sale, sold or dispensed by any person unless the gasoline has at least 2.0% oxygen content by weight.

(2) Average blend requirements. Over each two-month interval during the control period, gasoline intended as a final product for fueling of motor vehicles within the control areas defined in WAC 173-492-070 supplied by blenders to purchasers within the control areas defined in WAC 173-492-070 shall average at least 2.7% oxygen by weight, and in no case be less than 2.0% oxygen content by weight.

(3) Reports. Blenders shall provide periodic reports, as stipulated in the blenders registration, to ecology or the authority summarizing how the requirements of subsection (2) of this section were met. With prior approval from ecology or the authority, a credit trading program may be used to comply with these requirements. Such reports shall be on forms provided by ecology or the authority.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-040, filed 11/30/92, effective 12/1/92.]

WAC 173-492-050 Registration requirements. Each blender shall register with ecology or the authority each year, in each control area where a blender offers for sale, sells, or dispenses gasoline. Each request for registration shall be on forms supplied by ecology or the authority and shall be accompanied by a fee to compensate for the cost of administering the registration program, including on-site inspections necessary to verify compliance with these requirements. The location of each blender facility shall be included in the information provided by the blender at registration. The fee may be based on the volume of oxygenated gasoline sold or offered for sale by the blender in that control area to comply with the provisions of WAC 173-492-040, including separate fee categories for small, medium, large and very large volume blenders.

Registration fees shall be set by regulation by ecology or the authority.

[Statutory Authority: RCW 70.94 and section 211(m) of the Federal Clean Air Act. 96-19-094 (Order 96-03), § 173-492-050, filed 9/18/96, effective 10/19/96. Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-050, filed 11/30/92, effective 12/1/92.]

WAC 173-492-060 Labeling requirements. In addition to other labeling requirements, fuel dispensing systems delivering oxygenated gasoline shall be conspicuously labeled during the control periods and in the control areas stated in WAC 173-492-070 as follows:

"The gasoline dispensed from this pump is oxygenated and will reduce carbon monoxide pollution from motor vehicles."

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-060, filed 11/30/92, effective 12/1/92.]

WAC 173-492-070 Control areas and control periods. Beginning in 1992, the oxygenated gasoline requirements of this chapter shall apply to the following control area during the following control period:

		Control Period	
Control Area	County	Beginning	Ending
Spokane	Spokane	September 1	February 29

Upon approval by EPA, the control period for Spokane will be from October 1 to February 29.

[Statutory Authority: RCW 70.94 and section 211(m) of the Federal Clean Air Act. 96-19-094 (Order 96-03), § 173-492-070, filed 9/18/96, effective 10/19/96. Statutory Authority: Chapter 70.94 RCW and 42 USC 7545 Sec. 211(m). 94-07-040 (Order 93-20), § 173-492-070, filed 3/9/94, effective 4/9/94. Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-070, filed 11/30/92, effective 12/1/92.]

WAC 173-492-080 Enforcement and compliance. (1) Compliance with the requirements of this section shall be monitored and enforced by ecology or the authority. Noncompliance shall be subject to the penalties and other remedies provided in chapter 70.94 RCW.

(2) Ecology or the authority may designate any appropriate agency of the state to assist in the compliance monitoring of this regulation. Ecology shall make every effort to coordinate compliance monitoring of this regulation with the current duties of the department of agriculture division of weights and measures.

(3) Compliance with the standards set forth in this section shall be determined by use of testing methods approved by ecology. The maximum accuracy tolerance of this method shall be limited to +/-0.3% oxygen by weight, or an equivalent tolerance when measured by volume.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-080, filed 11/30/92, effective 12/1/92.]

WAC 173-492-090 Unplanned conditions. An unplanned condition, such as an unforeseen emergency or "act of God," which may interfere with compliance to this chapter, shall be reported to ecology or the authority as soon as possible. The responsible party shall also submit a full written report within ten days to ecology or the authority, including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence. Compliance with the requirements of this section does not relieve the responsible party from the responsibility to maintain continuous compliance with all the requirements of this chapter nor from the resulting liabilities for failure to comply. Ecology or the authority must consider the circumstances of the unplanned condition, and may use the circumstances when determining enforcement.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-090, filed 11/30/92, effective 12/1/92.]

WAC 173-492-100 Severability. The provisions of this regulation are severable and if any provision is held invalid, the application of such provision to the other circumstances and the remainder of this regulation shall not be affected.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-100, filed 11/30/92, effective 12/1/92.]

Chapter 173-495 WAC
WEATHER MODIFICATION

WAC

WAC 173-495-010 Purpose. This chapter, adopted under chapters 43.37 and 70.94 RCW establishes the responsibilities for the supervision and control of all weather modification activities within the state, and representation by the state in all interstate contacts relating to weather modification and control. This regulation provides the basic framework for carrying out the state's responsibility for such a program through the establishment of license and permit requirements and procedures, reporting, and fee requirements. The provisions of this chapter apply to all weather modification activities in all parts of the state except as specifically exempted in this chapter.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-010, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-010, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-010, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, words and phrases as used in this chapter have the following meanings:

(1) "Operation" means the performance of weather modification and control activities using a single permit or license under contract for the purpose of producing or attempting to produce a weather modifying effect within a geographical area.

(2) "Research and development" means theoretical analysis, exploration and experimentation, and the extension of investigative findings of theories of a scientific or technical nature into practical application for experimental and demonstration purposes. This includes the experimental production and testing of models, devices, equipment, materials, and processes.

(3) "Weather modification and control" means changing or attempting to change or control by artificial methods, the natural development of any or all atmospheric cloud forms or precipitation forms which occur in the troposphere.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-020, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-020, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-020, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-030 Requirement for licenses and permits. No person shall engage in weather modification activities except under and in accordance with a license and a permit issued by ecology, unless specifically exempt from this requirement in WAC 173-495-040.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-030, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-030, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-040 Requirements for exempt activities. The following weather modification and control activities are exempt from the license and permit requirements of RCW 43.37.100, and the liability requirements of RCW 43.37.190:

(1) All research and experiments related to weather modification control conducted within laboratories;

(2) Those weather modification operations designed to alleviate sudden, unexpected, hazardous conditions which require expeditious localized action for:

(a) Protection against fire;

(b) Prevention of frost;

(c) Dispersal of fog;

(3) Field research and development by institutions of higher learning;

(4) Any person proposing to conduct weather modification and control activities as described in subsection (2) of this section shall notify the air quality program, department of ecology, headquarters offices in Olympia, Washington, before proceeding. Notification must include the type of activity to be carried out, the person carrying out the activity, and the materials and technique of the application to be used;

(5) Any person proposing to conduct weather modification and control activities as described in subsection (3) of this section shall provide:

(a) A written description of the proposed program;

(b) Notice of actual operations ten days before beginning those activities; and

(c) Quarterly reports of operations and status to the Headquarters Office, Air Quality Program, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-040, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-040, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-040, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-045 Requirements for a regular license. All applicants for a weather modification license must be certified professional members of the American Meteorological Society or possess the academic achievements and professional experience necessary to receive such a certification. In cases where the applicant is an organization, the individual or individuals who will be in control and in charge of the weather modification and control activities must be required to meet the above standard.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-045, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-045, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-045, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-050 Requirements for a restricted license. (1) A restricted license may be issued to an applicant when:

(a) The applicant's proposed weather modification activities are limited solely to those designed to disperse fog over airports; and

(b) The applicant will be fully advised of the pertinent weather information by the meteorologist on duty during the airport fog dispersal activities.

(2) Applicants for restricted licenses are not required to meet the qualifications otherwise imposed by WAC 173-495-040.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-050, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-050, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-060 Procedures for issuing license. (1) Any person or organization desiring to obtain a license or restricted license shall apply to ecology on the form prescribed, listing name, business address, etc.

(2) Ecology may require additional information of the applicant to determine competency in the field of meteorology.The additional information must be requested of the applicant by certified mail, and must be submitted in writing.

(3) Before issuing any license, the applicant shall pay a fee of one hundred dollars to the state of Washington.

(4) The application shall be deemed received by ecology when received at the Headquarters Offices, Air Quality Program, Department of Ecology, P.O. Box 47600, Olympia, Washington, 98504-7600.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-060, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-060, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-060, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-065 Period of license. (1) Licenses issued under chapter 43.37 RCW and these regulations are effective for a period of one year, and will terminate at the end of the calendar year of issuance.

(2) The licensee may request a renewal of the license no later than December 1st. Ecology shall review the license renewal request after receiving a renewal fee of one hundred dollars made payable to the state of Washington.

(3) In the determination of whether or not to grant a license renewal, ecology shall consider information provided by the applicant on the facts and circumstances used to issue the original permit that were changed or altered. If ecology determines that the licensee no longer meets the requirements of competency in the field of meteorology, ecology may refuse to renew the license.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-065, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-065, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-065, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-070 Permit requirements. (1) Each weather modification operation not specifically exempted by statute or these regulations requires a permit. A separate permit must be issued for each operation.

(2) A license holder desiring to conduct a weather modification operation shall submit an application for a permit to ecology.

(3) The permit applicant must hold a valid weather modification license from the state of Washington.

(4) The applicant shall publish a notice of intention at least once a week for three consecutive weeks in a newspaper that has general circulation within the county in which the operation is to be conducted or affected.

(5) The licensee shall file proof of publication of the notice of intention with ecology within fifteen days from the date of last publication of the notice.

(6) The notice of intention must contain at least the following:

(a) The name and address of the licensee;

(b) The nature and object of the intended operation and the person or organization on whose behalf it is to be conducted;

(c) The area in which and the appropriate time during which the operation will be conducted;

(d) The area intended to be affected by the operation; and

(e) The materials and methods to be used in conducting the operation.

(7) The applicant shall furnish proof of financial responsibility, as described in WAC 173-495-120 of this chapter.

(8) The applicant shall pay a permit fee of one and one-half percent of the estimated cost of the operation. The estimated cost will be computed by ecology from available data.

(9) Before issuing a permit, ecology shall state, in writing, that the weather modification and control activities proposed have been determined to be for the general welfare and public good.

(10) Ecology shall hold a public hearing before any weather modification permit is issued.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-070, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-070, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-070, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-080 Permittee's report of operations—Requirement. The permittee is required to maintain reports on all operations on a daily basis, and submit them twice a month (1st day and 15th day) to ecology. The semi-monthly reports must include the following information:

(1) Number of days under contract;

(2) Number of days of operation and number of hours of each day, for all stations operated;

(3) The consumption rate and name of seeding agent used;

(4) A brief summary statement evaluating the past fifteen day period in regard to the seeding potential and experience;

(5) Location of operations;

(6) Name and mailing address of each individual, other than the licensee, participating or assisting in the operation;

(7) A brief statement of projected plans for the upcoming fifteen-day period;

(8) The permittee shall, in the event operations are unexpectedly terminated, submit a special report covering the portion of the half-month period of operation. All reports must be post-marked not later than one day after due date;

(9) All semi-monthly reports are public records, which are open to public inspection.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-080, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-080, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-080, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-100 Revocation, suspension, modification. (1) All permits authorized by RCW 43.37.110 must contain the following provisions: "Ecology may, if it appears that continuing operation under this permit will cause immediate injury to persons or property, terminate or otherwise modify the terms of this permit in order to alleviate an emergency situation by giving notice to the permittee by telegram or other writing."

(2) All permits authorized by RCW 43.37.110 may be revoked, suspended, or modified when ecology has reason to believe that good cause exists and that the revocation, suspension, or modification is required for the general welfare and public good. A written notice must be sent by certified mail to the permittee before any revocation, suspension, or modification of the permit is executed. Opportunity for comment by the permittee must be allowed. Any final ecology decision must be in writing.

(3) In the event the applicant desires to appeal any permit revocation, modification, or suspension action by ecology the appeal must be filed with the pollution control hearings board in Olympia within thirty days of ecology's action. An appeal does not constitute a stay.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-100, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-100, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-100, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-120 Proof of financial responsibility. A permit applicant shall furnish proof of financial responsibility to ecology by one of the following:

(1) Copy of insurance policy or binder for the operator;

(2) A current balance sheet showing sufficient assets to demonstrate financial responsibility;

(3) A bond for safe performance; or

(4) Other information the applicant may provide to ecology, in writing, if the alternate documents contained in subsections (1) through (3) of this section, are not feasible or available. If other information is provided, the applicants must explain the reason the documents listed in subsections (1) through (3) of this section are not provided.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-120, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-120, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-120, filed 12/29/77.]

Chapter 173-500 WAC

WATER RESOURCES MANAGEMENT PROGRAM ESTABLISHED PURSUANT TO THE WATER RESOURCES ACT OF 1971

WAC

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; Order DE 75-23, § 173-500-010, filed 1/6/76.]

WAC 173-500-020 Purpose. The purpose of this chapter is to set forth a program which will provide guidelines to facilitate the further development of the water resources to the extent of their availability for further appropriation and implement the legislative intent as contained in RCW 90.54.040(1). The program shall, where appropriate:

(1) Identify and foster development of water resource projects;

(2) Declare preferences or priorities of use by categories;

(3) Set forth streams closed to future appropriation;

(4) Establish flows on perennial streams of the state in amounts necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values, and navigational values;

(5) Allocate quantities for beneficial uses;

(6) Reserve water for future beneficial use;

(7) Withdraw waters from additional appropriation when sufficient information or data are lacking for the making of sound decisions;

(8) Establish criteria for limit beyond which further appropriation will not be made;

(9) Designate areas within the state to be used for management purposes; and

(10) Be guided by the declaration of fundamentals contained in RCW 90.54.020.

[Order DE 75-23, § 173-500-020, filed 1/6/76.]

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 173-500-040 Water resource inventory areas. For the purposes of this chapter, the state is divided into 62 areas known as water resource inventory areas (WRIAs). The names and numbers of these areas are as follows and are shown on the attached map:

WATER RESOURCES INVENTORY AREAS

WRIA Number	Name
01.	Nooksack
02.	San Juan
03.	Lower Skagit-Samish
04.	Upper Skagit
05.	Stillaguamish
06.	Island
07.	Snohomish
08.	Cedar-Sammamish
09.	Duwamish-Green
10.	Puyallup-White
11.	Nisqually
12.	Chambers-Clover
13.	Deschutes
14.	Kennedy-Goldsborough
15.	Kitsap
16.	Skokomish-Dosewallips
17.	Quilcene-Snow
18.	Elwah-Dungeness
19.	Lyre-Hoko
20.	Soleduck-Hoh
21.	Queets-Quinault
22.	Lower Chehalis
23.	Upper Chehalis
24.	Willapa
25.	Grays-Elokoman
26.	Cowlitz
27.	Lewis
28.	Salmon-Washougal
29.	Wind-White Salmon
30.	Klickitat
31.	Rock-Glade
32.	Walla Walla
33.	Lower Snake
34.	Palouse
35.	Middle Snake
36.	Esquatzel Coulee
37.	Lower Yakima
38.	Naches
39.	Upper Yakima

WATER RESOURCES INVENTORY AREAS

WRIA Number,	Name
40.	Alkali-Squilchuck
41.	Lower Crab
42.	Grand Coulee
43.	Upper Crab-Wilson
44.	Moses Coulee
45.	Wenatchee
46.	Entiat
47.	Chelan
48.	Methow
49.	Okanogan
50.	Foster
51.	Nespelem
52.	Sanpoil
53.	Lower Lake Roosevelt
54.	Lower Spokane
55.	Little Spokane
56.	Hangman
57.	Middle Spokane
58.	Middle Lake Roosevelt
59.	Colville
60.	Kettle
61.	Upper Lake Roosevelt
62.	Pend Oreille

[Order DE 75-23, § 173-500-040, filed 1/6/76.]

WAC 173-500-050 Definitions. For purposes of this chapter and subsequent regulations formulated for planning and management within individual water resource inventory areas, the following definitions shall be used:

(1) "**Allocation**" means the designating of specific amounts of the water resource for specific beneficial uses.

(2) "**Appropriation**" means the process of legally acquiring the right to specific amounts of the public water resource for application to beneficial uses.

(3) "**Base flow**" means a level of streamflow established in accordance with provisions of chapter 90.54 RCW required in perennial streams to preserve wildlife, fish, scenic, aesthetic, and other environmental and navigational values.

(4) "**Beneficial uses**" are uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

(5) "**Consumptive use**" means use of water whereby there is a diminishment of the water source.

(6) "**Department**" means the Washington state department of ecology.

(7) "**Hydrograph**" is a graph showing the variations of streamflow (or stream discharge) with respect to time during a year as determined at a specific cross-sectional location on the stream.

(8) "**Low flow**" means those flow level limitations appearing as provisions on permits and certificates issued by the department, or its predecessors, prior to the effective dates of chapters 173-501 through 173-599 WAC.

(9) "**Nonconsumptive use**" is a type of water use where either there is no diversion from a source body, or where there is no diminishment of the source.

(10) "**Perennial stream**" means a stream the natural flow of which is normally continuous at any given location.

(11) "**Stream management unit**" means stream segments, reaches, or tributaries, each containing a control station, that are identified on stream reach maps in adopted water resource management program documents as units for defining base flow levels.

(12) "**Water right**" means a right to make beneficial use of public waters of the state.

[Order DE 75-23, § 173-500-050, filed 1/6/76.]

WAC 173-500-060 General provisions. (1) The provisions of this chapter shall apply to chapters 173-501 through 173-599 WAC unless the language of said chapters is clearly to the contrary.

(2) As sufficient data are obtained for each WRIA and/or grouping thereof in the state to enable the department to formulate a water resource planning and management program for such area, the department shall by regulation establish policies for the beneficial use of public waters pursuant to RCW 90.54.040.

(3) Water rights established prior to the effective date of rules adopted under chapters 173-500 and 173-501 through 173-599 WAC shall not be affected by such rules.

(4) **Low flow limitations to prevail** (1) Notwithstanding the establishment of base flows established hereunder, existing low flow limitations shall remain in effect.

(5) **Base flow provisions for water rights.**

(a) Surface water and/or ground water appropriation permits, issued subsequent to the effective dates of chapters 173-501 through 173-599 WAC, that will allow either direct diversion from or have a measurable effect on streams where base flow limitations of this chapter, and any such permits or certificates shall be appropriately conditioned to assure maintenance of said base flows.

(b) The base flow provisions for any water right located in a stream management unit shall specifically describe the base flow levels for the control station in that unit and shall refer generally to other downstream base flow requirements that may also become controlling and critical to the use of water under such right.

(6) **Base flow changes.** If it becomes necessary to change a control station location or to add new control stations to improve management capability, the department shall develop streamflow relationships, by accepted engineering procedures, between previously established control station locations and the new location for use in regulating water rights that are subject to base flow limitations.

(7) **Minimum water flows and levels.** The provisions of this chapter shall in no manner be interpreted to preclude utilization of chapter 90.22 RCW.

(8) **Priorities or allocation by use categories - limitations.** Nothing in chapters 173-501 through 173-599 WAC relating to priorities or allocations by use shall be construed

to apply to water rights or the historic water use patterns that predate the individual management regulations.

[Order DE 75-23, § 173-500-060, 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.]

WAC 173-500-080 Critical water resource situation response process. In areas subject to the department of ecology's jurisdiction, where there may be current or anticipated critical water resource or related water quality concerns, the local government(s), the state or the affected federally recognized tribe(s) may request that representatives from all three governmental entities and, as needed, appropriate federal agencies agree to the designation of the area as a critical water resource situation. All represented parties must agree to the designation. Upon designation, an intergovernmental group will be convened.

The purpose of the intergovernmental group is to cooperatively design a consultation strategy to address the problem(s) which triggered this critical situation response process.

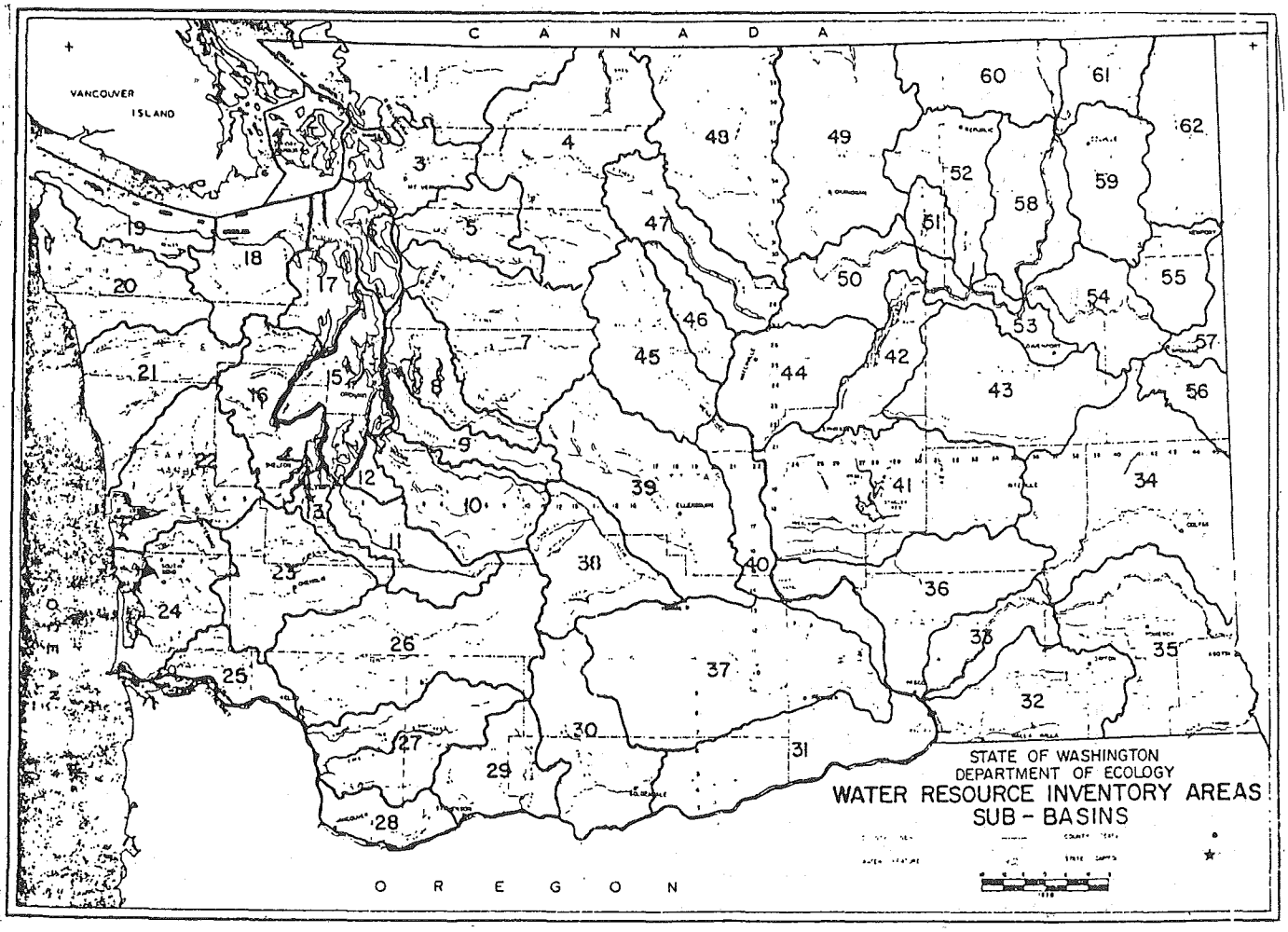
The legal rights and remedies available to the three governmental entities shall not be compromised or abridged by participation in the critical situation response process. However, all of the parties agree to undertake a good faith effort to resolve the critical water resource situation without first resorting to legal action.

When the intergovernmental group determines that a critical water resource situation exists or requires further evaluation or data collection, the parties will consider applying those tools necessary to protect the resources. These tools must be exercised within 12 months or as otherwise agreed to by the parties, and include, but are not limited to: Targeted conservation, efficiency, reuse; compliance and enforcement; dispute resolution assistance, memoranda of understanding and other agreements; local government restrictions on permit issuance or moratoria; basin withdrawal by adoption of administrative regulations under RCW 90.54.050 or limited state permit issuance.

[Statutory Authority: Chapters 34.05 and 90.54 RCW. 91-18-011 (Order 91-25), § 173-500-080, filed 8/23/91, effective 9/23/91.]

WAC 173-500-990 Map—Water resources inventory areas sub-basins.

WATER RESOURCES INVENTORY AREAS SUB-BASINS.



[Order DE 75-23, Map (codified as WAC 173-500-990), filed 1/6/76.]

Chapter 173-501 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—NOOKSACK WATER RESOURCE INVENTORY AREA (WRIA) 1

WAC

WAC 173-501-010 General provision. These rules apply to waters within the Nooksack water resource inventory area (WRIA 1), as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (Minimum water flows and levels), and in accordance with chapter 173-500 WAC (Water resources management program).

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-010, filed 12/4/85.]

WAC 173-501-020 Purpose. Chapter 90.54 RCW (Water Resources Act of 1971) requires that utilization and management of waters of the state be guided by a number of fundamentals, including:

Uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state, are declared to be beneficial. (RCW 90.54.020(1))

The quality of the natural environment shall be protected and, where possible, enhanced as follows:

Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. Lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served. (RCW 90.54.020 (3)(a))

Waters of the state shall be of high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry. Notwithstanding that 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 in those situations where it is clear that overriding considerations of the public interest will be served. (RCW 90.54.020 (3)(b))

The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Nooksack water resource inventory area with instream flows and levels necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values, and navigational values, as well as recreation and water quality.

In administering and enforcing this regulation, the department's actions shall be consistent with the provisions of chapter 90.54 RCW.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-020, filed 12/4/85.]

WAC 173-501-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Stream Management Reach
Anderson Creek Gage # WDOE-2109-00	1.4 Section 19 T. 39 N., R. 4 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Bells Creek Gage # WDOE-2073-00	0.5 Section 21 T. 39 N., R. 5 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Bertrand Creek Gage # WDOE-2124-00	1.0 Section 26 T. 40 N., R. 2 E.	From U.S./Canada border to confluence with Nooksack River, including all tributaries.
California Creek Gage # WDOE-2134-00	3.0 Section 21 T. 40 N., R. 1 E.	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
Canyon Creek Gage # WDOE-2045-00	0.2 Section 35 T. 40 N., R. 6 E.	From confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Canyon Creek at Kulshan Gage # 12-2085-00	0.2 Section 27 T. 39 N., R. 5 E.	From confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Cornell Creek Gage # WDOE-2057-00	0.6 Section 1 T. 39 N., R. 6 E.	From the confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Dakota Creek near Blaine Gage #12-2140-00	3.5 Section 9 T. 40 N., R. 1 E.	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
Deer Creek Gage # WDOE-2130-50	0.2 Section 28 T. 39 N., R. 2 E.	From the confluence with Tenmile Creek to headwaters, including all tributaries.
Fishtrap Creek at Lynden Gage # 12-2120-00	6.9 Section 16 T. 40 N., R. 3 E.	From U.S./Canada border to confluence with Nooksack River, including all tributaries.
Gallop Creek Gage # WDOE-2056-00	0.3 Section 7 T. 39 N., R. 7 E.	From the confluence with N. Fk. Nooksack River to headwaters, including all tributaries.

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Stream Management Reach
Hutchinson Creek Gage # WDOE-2101-00	1.8 Section 36 T. 38 N., R. 5 E.	From confluence with South Fork Nooksack River to headwaters, including all tributaries.
Johnson Creek Gage # WDOE-2149-00	0.5 Section 35 T. 41 N., R. 4 E.	From U.S./Canada border to headwaters including all tributaries.
Kendall Creek Gage # 12-2065-00	0.1 Section 3 T. 39 N., R. 5 E.	From the confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Maple Creek Gage # WDOE-2059-00	0.8 Section 30 T. 40 N., R. 6 E.	From confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Nooksack River (at Deming) 12-2105-00	36.6 Section 31 T. 39 N., R. 5 E.	From confluence with Smith Creek to confluence of North Fork and Middle Fork Nooksack Rivers.
Nooksack River (at Ferndale) 12-2131-00	5.8 Section 29 T. 39 N., R. 2 E.	From influence of mean annual high tide at low instream flow levels to confluence with, and including, Smith Creek.
Nooksack River (Middle Fork) 12-2080-00	5.0 Section 13 T. 38 N., R. 5 E.	From confluence with North Fork to headwaters.
Nooksack River (North Fork) 12-2072-00	44.1 Section 10 T. 39 N., R. 5 E.	From confluence with Middle Fork to headwaters.
Nooksack River (South Fork) 12-2090-00	5.0 Section 19 T. 38 N., R. 5 E.	From confluence with Nooksack River (mainstem) to headwaters.
Porter Creek Gage # WDOE-2084-00	0.7 Section 11 T. 38 N., R. 5 E.	From the confluence with M. Fk. Nooksack R. to headwaters, including all tributaries.
Racehorse Creek Gage # WDOE-2071-00	1.5 Section 11 T. 39 N., R. 5 E.	From confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Saar Creek Gage # 12-2155-00	0.2 Section 31 T. 41 N., R. 5 E.	From U.S./Canada border to headwaters, including all tributaries.
Silver Creek Gage # WDOE-2132-00	2.0 Section 4 T. 38 N., R. 2 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Skookum Creek near Wickersham Gage # 12-2095-00	0.1 Section 27 T. 37 N., R. 5 E.	From confluence with South Fork Nooksack River to headwaters, including all tributaries.
Smith Creek Gage # WDOE-2111-00	0.8 Section 22 T. 39 N., R. 4 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Sumas River near Sumas Gage # 12-2145-00	2.1 Section 2 T. 41 N., R. 4 E.	From U.S./Canada border to headwaters including all tributaries.
Tenmile Creek at Laurel Gage # 12-2129-00	4.4 Section 13 T. 39 N., R. 2 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Terrell Creek Gage # WDOE-2133-00	2.2 Section 31 T. 40 N., R. 1 E.	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
Wiser Lake Creek Gage # WDOE-2126-00	0.7 Section 2 T. 39 N., R. 2 E.	From confluence with Nooksack River to headwaters, including all tributaries.

(2) Instream flows are established for the stream management units in WAC 173-501-030(1) as follows:

Instream Flows in the Nooksack WRIA
(Instantaneous cubic feet per second)

Month	Day	WDOE-2109-00 Anderson Cr.	WDOE-2073-00 Bells Cr.	WDOE-2124-00 Bertrand Cr.	WDOE-2134-00 California Cr.
Jan.	1	50	4*	90*	40*
	15	50	4*	90*	40*
Feb.	1	50	4*	90*	40*
	15	50	3*	90*	40*
Mar.	1	50	2*	90*	40*
	15	50	2*	90*	25*
Apr.	1	40	3*	80*	18*
	15	31	4*	60*	13*
May	1	25*	5*	50*	9*
	15	20*	6*	40*	6*
Jun.	1	16*	6*	33*	4*
	15	13*	6*	25*	3*
Jul.	1	10*	3*	21*	2*
	15	8*	2*	17*	2*
Aug.	1	6*	1*	13*	2*
	15	6*	1*	13*	2*
Sep.	1	6*	1*	13*	2*
	15	6*	1*	13*	2*
Oct.	1	8*	1*	13*	2*
	15	11*	2*	20*	2*
Nov.	1	15*	3*	30*	4*
	15	20	4*	40*	7*
Dec.	1	30	4*	60*	15*
	15	50	4*	90*	40*

* Denotes closure period. No further consumptive rights issued for use during this time.

Month	Day	WDOE-2045-00 Canyon Creek	WDOE-2085-00 Canyon (Lk) Cr.	WDOE-2057-00 Cornell Creek
Jan.	1	150	50	20
	15	150	50	20
Feb.	1	150	50	20
	15	150	50	20
Mar.	1	150	50	20
	15	150	50	20
Apr.	1	150	50	20
	15	150	50	20
May	1	150	50	20
	15	150	50	20
Jun.	1	150	50	15
	15	150	50	9
Jul.	1	150*	50*	25*
	15	80*	30*	3*
Aug.	1	40*	15*	3*
	15	40*	10*	3*
Sep.	1	40*	10*	3*
	15	40*	10*	3*
Oct.	1	55*	20*	5*
	15	80*	23*	10*
Nov.	1	90*	27*	20*
	15	110	32	20
Dec.	1	130	40	20
	15	150	43	20

Month	Day	12-2140-00 Dakota Creek	WDOE-2130-50 Deer Creek	12-2120-00 Fishtrap Cr.
Jan.	1	60*	10*	55*
	15	60*	10*	55*
Feb.	1	60*	10*	55*
	15	60*	10*	55*
Mar.	1	60*	10*	55*
	15	40*	10*	55*
Apr.	1	30*	8*	45*
	15	20*	6*	35*
May	1	15*	5*	30*
	15	10*	4*	25*
Jun.	1	7*	3*	20*
	15	5*	2*	15*
Jul.	1	4*	2*	12*
	15	3*	1*	10*
Aug.	1	3*	1*	8*
	15	3*	1*	8*
Sep.	1	3*	1*	8*
	15	3*	1*	8*
Oct.	1	3*	2*	18*
	15	4*	2*	20*
Nov.	1	5*	3*	30*
	15	10*	4*	40*
Dec.	1	20*	5*	55*
	15	60*	7*	55*

Month	Day	WDOE-2056-00 Gallop Creek	WDOE-2101-00 Hutchinson Creek	WDOE-2149-00 Johnson Creek	12-2065-00 Kendall Cr.
Jan.	1	12	60	60*	10*
	15	12	60	60*	10*
Feb.	1	12	60	60*	10*
	15	12	60	60*	10*
Mar.	1	12	60	60*	10*
	15	12	60	60*	10*
Apr.	1	'12	60	60*	10*
	15	12	60	45*	10*
May	1	12	60	35*	10*
	15	12	60	25*	10*
Jun.	1	12	60	20*	10*
	15	12	60	15*	10*
Jul.	1	12*	60*	12*	10*
	15	8*	40*	9*	6*
Aug.	1	6*	25*	9*	4*
	15	5*	15*	9*	3*
Sep.	1	5*	15*	9*	3*
	15	5*	15*	9*	3*
Oct.	1	5*	25*	9*	5*
	15	5*	30*	9*	6*
Nov.	1	8*	35*	13*	7*
	15	12	40	20*	8*
Dec.	1	12	50	30*	9*
	15	12	60	60*	10*

Month	Day	WDOE-2059-00 Maple Creek	12-2105-00 Nooksack R. (at Deming)	12-2131.00 Nooksack R. (at Ferndale)
Jan.	1	20	2050	2900
	15	20	2050	2900
Feb.	1	20	2150	2900
	15	30	2350	2900
Mar.	1	30	2350	2900
	15	30	2350	2900
Apr.	1	30	2350	2900
	15	30	2350	2900
May	1	30	3325	2900
	15	30	3400	3500
Jun.	1	30	3400	3500
	15	30	3400	3500
Jul.	1	20*	3400	3500
	15	20*	2950	3000

Month	Day	WDOE-2059-00 Maple Creek	12-2105-00 Nooksack R. (at Deming)	12-2131.00 Nooksack R. (at Ferndale)
Aug.	1	20*	1700	2400
	15	10*	1700	1900
Sep.	1	10*	1700	1800
	15	10*	1700	1700
Oct.	1	20*	1700	1700
	15	20*	2050	2050
Nov.	1	20*	2050	2300
	15	20	2050	2500
Dec.	1	20	2050	2900
	15	20	2050	2900

Month	Day	12-2080-00 Nooksack River (Middle Fork)	12-2072-00 Nooksack River (North Fork nr. Deming)	12-2090-00 Nooksack River (South Fork)
Jan.	1	275	1100	650
	15	275	1100	650
Feb.	1	380	1100	650
	15	380	1100	850
Mar.	1	380	1100	850
	15	380	1100	850
Apr.	1	380	1100	850
	15	380	1100	850
May	1	380	1100	850
	15	450	2000	850
Jun.	1	525	2000	850
	15	525	2000	850
Jul.	1	525	2000	850*
	15	400	2000	550*
Aug.	1	275	1100	300*
	15	275	1100	300*
Sep.	1	275	1100*	300*
	15	275	1100*	300*
Oct.	1	275	1100*	300*
	15	275	1100*	650*
Nov.	1	275	1100*	650
	15	275	1100	650
Dec.	1	275	1100	650
	15	275	1100	650

Month	Day	WDOE-2084-00 Porter Creek	WDOE-2071-00 Racehorse Cr.	WDOE-2155-00 Saar Creek
Jan.	1	10	60	35*
	15	10	60	35*
Feb.	1	10	60	35*
	15	10	60	35*
Mar.	1	10	60	35*
	15	10	60	35*
Apr.	1	10	60	35*
	15	10	80	35*
May	1	10	80	35*
	15	10	90	35*
Jun.	1	10	90	35*
	15	10	90	35*
Jul.	1	10*	50*	22*
	15	6*	35*	15*
Aug.	1	3*	20*	9*
	15	3*	20*	6*
Sep.	1	3*	20*	6*
	15	3*	20*	6*
Oct.	1	3*	20*	12*
	15	6*	30*	14*
Nov.	1	10*	35*	17*
	15	10	40	19*
Dec.	1	10	47	23*
	15	10	55	35*

Month	Day	WDOE-2132-00 Silver Creek	12-2095-00 Skookum Cr.	WDOE-2111-00 Smith Creek
Jan.	1	12	115	40
	15	12	115	40

Month	Day	WDOE-2132-00 Silver Creek	12-2095-00 Skookum Cr.	WDOE-2111-00 Smith Creek
Feb.	1	12	115	40
	15	12	115	40
Mar.	1	12	115	40
	15	12	115	40
Apr.	1	12	115	40
	15	12	115	60
May	1	12*	115	60*
	15	9*	115	60*
Jun.	1	7*	115	60*
	15	6*	115	40*
Jul.	1	4*	115*	35*
	15	3*	66*	25*
Aug.	1	3*	66*	15*
	15	3*	66*	10*
Sep.	1	3*	66*	10*
	15	3*	66*	10*
Oct.	1	4*	66*	15*
	15	4*	80*	20*
Nov.	1	6*	115*	23*
	15	10	115	25
Dec.	1	12	115	30
	15	12	115	35

Month	Day	12-2145-00 Sumas River	12-2129-00 Tenmile Cr.	WDOE-2133-00 Terrell Cr.	WDOE-2126-00 Wiser Lk. Cr.
Jan.	1	100*	40*	12	11
	15	100*	40*	12	11
Feb.	1	100*	40*	12	11
	15	100*	40*	12	11
Mar.	1	100*	40*	12	11
	15	100*	40*	12	11
Apr.	1	100*	40*	12	9
	15	100*	40*	12	7
May	1	70*	30*	8*	6*
	15	60*	22*	5*	5*
Jun.	1	40*	17*	4*	4*
	15	35*	12*	3*	3*
Jul.	1	25*	10*	2*	2*
	15	20*	7*	2*	2*
Aug.	1	20*	5*	2*	2*
	15	20*	5*	2*	2*
Sep.	1	20*	5*	2*	2*
	15	20*	6*	2*	2*

Month	Day	12-2145-00 Sumas River	12-2129-00 Tenmile Cr.	WDOE-2133-00 Terrell Cr.	WDOE-2126-00 Wiser Lk. Cr.
Oct.	1	20*	7*	2*	2*
	15	20*	10*	2*	2*
Nov.	1	35*	15*	3*	3*
	15	60*	20*	5	6
Dec.	1	80*	30*	7	8
	15	100*	40*	12	11

(3) Instream flow hydrographs, as represented in Appendix A of the document entitled Nooksack Instream Resources Protection Program, shall be used for identification of instream flows on those days not specifically identified in WAC 173-501-030(2).

(4) Future consumptive water right permits issued hereafter for diversion of surface water in the Nooksack WRIA and perennial tributaries shall be expressly subject to instream flows established in WAC 173-501-030 (1) through (3) as measured at the appropriate gage, preferably the nearest one downstream and at all other downstream control stations, except for those uses described in WAC 173-501-070 (1) through (3).

(5) Projects that would reduce the flow in a section of stream's length (e.g., hydroelectric projects that withdraw streamflow from some length of the channel) are considered consumptive with respect to the affected stream reach. Such projects will be subject to instream flow requirements as specified by the department. These flows will be those established in WAC 173-501-030 (1) through (3) and WAC 173-501-040, or may be flows specifically tailored to that particular project and stream reach. When studies are required to determine such reach and project-specific flow requirements, the department will require the project proponent to conduct such studies in consultation with affected state and federal agencies and Indian tribes.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-030, filed 12/4/85.]

WAC 173-501-040 Surface water source limitations to further consumptive appropriation. (1) The following table indicates the status of streams, tributaries and lakes affected by this chapter.

Source Name	Tributary To	Former Administrative Status	Status Under Regulation	Period of Closure	Flow Established
Anderson Creek	Nooksack River	low flow	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Bells Creek	North Fork Nooksack	open	closure	year round	WAC 173-501-030(2)
Bertrand Creek	Nooksack River	closure	closure	year round	WAC 173-501-030(2)
Black Slough	Nooksack - South Fork	low flow	low flow		
California Creek	Drayton Harbor	closure	closure	year round	WAC 173-501-030(2)
Canyon Creek	North Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Canyon (Lake) Creek	Middle Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Chuckanut Creek	Chuckanut Bay	low flow	closure	year round	natural flow
Colony Creek (incl. Whitehall)	Samish Bay	open	closure	year round	natural flow
Cornell Creek	North Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Dakota Creek	Drayton Harbor	closure	closure	year round	WAC 173-501-030(2)
Deer Creek	Barrett Lake (Tenmile)	closure	closure	year round	WAC 173-501-030(2)
Fishtrap Creek (incl. Double Ditch)	Nooksack River	closure	closure	year round	WAC 173-501-030(2)
Fourmile Creek	Tenmile Creek	closure	closure	year round	
Gallop Creek	North Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Hutchinson Creek	South Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Johnson Creek	Sumas River	closure	closure	year round	WAC 173-501-030(2)
Kamm Ditch/Stickney Slough	Nooksack River	closure	closure	year round	natural flow
Kendall Creek	North Fork Nooksack	open	closure	year round	WAC 173-501-030(2)

Source Name	Tributary To	Former Administrative Status	Status Under Regulation	Period of Closure	Flow Established
Maple Creek	North Fork Nooksack	open	closure	July 1-Oct. 31	WAC 173-501-030(2)
Nooksack River - mainstem	Bellingham Bay	low flow	minimum flow (new flow)		WAC 173-501-030(2)
Nooksack River - Middle Fk.	Nooksack River	low flow	minimum flow (new flow)		WAC 173-501-030(2)
Nooksack River - North Fk.	Nooksack River	low flow	partial year closure	Sept. 1-Oct. 31	WAC 173-501-030(2)
Nooksack River - South Fk.	Nooksack River	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Oyster Creek	Samish Bay	open	closure	year round	natural flow
Padden Creek	Bellingham Bay	open	closure	year round	natural flow
Porter Creek	Middle Fork Nooksack	open	partial year closure	July 1-Oct. 1	WAC 173-501-030(2)
Racehorse Creek	North Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Saar Creek	Vedder Canal-Canada	open	closure	year round	WAC 173-501-030(2)
Saxon Creek	South Fork Nooksack	open	closure	year round	natural flow
Silver Creek	Nooksack River	low flow	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Skookum Creek	South Fork Nooksack	low flow	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Smith Creek	Nooksack River	low flow	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Squalicum Creek	Bellingham Bay	closure	closure	year round	
Sumas River	Vedder Canal-Canada	closure	closure	year round	WAC 173-501-030(2)
Tenmile Creek	Nooksack River	closure	closure	year round	WAC 173-501-030(2)
Terrell Creek	Birch Bay	open	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Thompson Creek	Glacier Cr./N. Fk.	open	partial year closure	July 1-Oct. 31	natural flow
Unnamed Stream - Elder Ditch/Scott Ditch	Nooksack River	low flow	low flow		
Unnamed stream - White Creek	Colony Creek	closure	closure		
Whatcom Creek*	Bellingham Bay	open	closure	year round	natural flow
Wiser Lake Creek	Nooksack River	low flow	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Lummi Indian Reservation Streams		closure	closure		
Barrett Lake	Tenmile Creek	closure	closure		NA
Green Lake	Fourmile Creek	closure	closure		NA
Lake Terrell	Terrell Creek	closure	closure		NA
Lake Whatcom**	Whatcom Creek	court-ordered lake level	closure	year round	
Wiser Lake	Wiser Lake Creek	closure	closure		NA

For streams listed as "natural flow," insufficient data are available to develop instream flows outside the closure period. Water right applications for consumptive use will be considered on a case by case basis in consultation with the departments of fisheries and game; tribes will also be notified.

Streams which are not specifically listed in this regulation are affected by the regulation if they are tributary to streams or lakes listed herein; otherwise such streams are not affected.

* No exemptions. See WAC 173-501-070(2).

** Lake Whatcom and its tributaries are closed to all further consumptive appropriation; however, any water right applications for consumptive use which were on file with the department of ecology on August 7, 1985 shall be exempt from the closure through the period extending one year from the effective date of this chapter.

(2) When a project (as described in WAC 173-501-030(5)) is proposed on a stream that is closed to further appropriations, the department shall deny the water right application unless the project proponent can adequately demonstrate that the project does not conflict with the intent of the closure.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-040, filed 12/4/85.]

WAC 173-501-050 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-050, filed 12/4/85.]

WAC 173-501-060 Ground water. If department investigations determine that there is significant hydraulic continuity between surface water and the proposed ground water source, any water right permit or certificate issued shall be subject to the same conditions as affected surface waters. If department investigations determine that withdrawal of ground water from the source aquifers would not interfere with stream flow during the period of stream closure or with maintenance of minimum instream flows, then applications to appropriate public ground waters may be approved.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-060, filed 12/4/85.]

WAC 173-501-070 Exemptions. (1) Nothing in this chapter shall affect existing water rights, perfected riparian rights, federal Indian and non-Indian reserved rights, appropriative or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Single domestic, (including up to 1/2 acre lawn and garden irrigation and associated noncommercial stockwatering) shall be exempt from the provisions established in this chapter, except that Whatcom Creek is closed to any further appropriation, including otherwise exempted single domestic use. For all other streams, when the cumulative impact of single domestic diversions begins to significantly affect the quantity of water available for instream uses, then any water rights issued after that time shall be issued for in-house use only, if no alternative source is available.

(3) Nonconsumptive uses which are compatible with the intent of this chapter may be approved.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-070, filed 12/4/85.]

WAC 173-501-080 Policy statement for future permitting actions. (1) No rights to divert or store public surface waters of WRIA 1 shall hereafter be granted which shall conflict with the purpose of this chapter except as provided in RCW 90.54.020 (3)(a).

(2) Consistent with the provisions of chapter 90.54 RCW, it is the policy of the department to preserve an appropriate minimum instream flow in all perennial streams and rivers as well as the water levels in all lakes in the Nooksack WRIA by encouraging the use of alternate sources of water which include (a) ground water, (b) storage water, or (c) acquisition of existing water rights.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-080, filed 12/4/85.]

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 173-503 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—LOWER AND UPPER SKAGIT WATER RESOURCES INVENTORY AREA (WRIA 3 AND 4)

WAC

WAC 173-503-010 General provision. These rules apply to waters within the Lower and Upper Skagit water resources inventory area (WRIA 3 and 4), as defined in WAC 173-500-040, excluding the Samish River subbasin, Fidalgo, Guemes, Cypress, Hope and Goat islands. This chapter is promulgated pursuant to chapter 90.54 (Water Resources Act of 1971), chapter 90.22 RCW (Minimum water flows and levels), and chapter 173-500 WAC (Water resources management program).

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-010, filed 3/14/01, effective 4/14/01.]

WAC 173-503-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Lower and Upper Skagit water resources inventory area and Cultus Mt. Tributaries with instream flows and levels necessary to provide for the protection and preservation of wildlife, fish, scenic, aesthetic, and other environmental values, and navigational values, as well as recreation and water quality.

Chapter 90.54 RCW (Water Resources Act of 1971) requires that utilization and management of waters of the state be guided by a number of fundamentals, including:

Uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state, are declared to be beneficial. (RCW 90.54.020(1))

The quality of the natural environment shall be protected and, where possible, enhanced, as follows:

Perennial rivers and streams of the state shall be retained with base flows necessary to provide for the protection and preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. Lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served. (RCW 90.54.020 (3)(a))

Waters of the state shall be of high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry. Notwithstanding that

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 in those situations where it is clear that overriding considerations of the public interest will be served. (RCW 90.54.020 (3)(b))

In administering and enforcing this regulation, the department's actions shall be consistent with the provisions of chapter 90.54 RCW.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-020, filed 3/14/01, effective 4/14/01.]

WAC 173-503-030 Findings. Ecology finds that:

(1) The magnitude or variability of flows are important in maintaining the aquatic ecosystem that sustains both fish and other valuable resources. Criteria to limit total withdrawals of water from the Lower Skagit River were developed to protect the aquatic ecosystem in the region covered by this rule.

(2) To protect the estuary area below river mile 8.1 the duration of flow inundation of at least one foot of depth, in selected estuary habitat, can be reduced no more than ten percent from existing conditions from the date of enactment of this regulation. This criterion applies to the period of February through August to withdrawals from the Skagit River. Total withdrawals greater than eight hundred thirty-six cubic feet per second during that period will result in a greater than ten percent deviation from existing conditions and therefore would result in harm to the fisheries resources and aquatic ecosystem in the region covered by this rule.

(3) Protection of the aquatic ecosystem of the estuary in the months of September through January requires that the total withdrawals of water from the Skagit River not exceed 1/10 of the fifty percent exceedance flow for each month, based on the period of record (1/1/41 - 12/31/95) for the U.S. Geological Survey (USGS) stream gage on the Skagit River near Mt. Vernon, WA (Sta. #12-2005-00) in order to maintain channel morphology and other estuarine and riverine functions. This equates to a low point of eight hundred thirty cubic feet per second during the month of September. Total withdrawals greater than eight hundred thirty cubic feet per second during the month of September will not protect and preserve fish, wildlife and other environmental values and therefore would be harmful to fisheries resources and the aquatic ecosystem in the region covered by this rule in violation of chapter 90.54 RCW.

(4) The rules setting minimum flows in the Lower and Upper Skagit River (WRIA 3 and 4) (WAC 173-503-040) and finding certain waters available (WAC 173-503-050) are necessary to protect and preserve wildlife, fish, scenic, aesthetic and other environmental values.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-030, filed 3/14/01, effective 4/14/01.]

WAC 173-503-040 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Stream Management Unit Name Control Station No.	Control Station by River Mile and Section, Township and Range; Latitude and Longitude	Stream Management Reach
Skagit Mainstem:		
Skagit River near Mt. Vernon, WA USGS Sta. #12-2005-00	River Mile (RM) 15.7	From mouth of Skagit River including tidal fluctuation to headwaters.*
Cultus Mountain Tributaries:		
Mundt Creek	Stream gage will be installed at RM 3.4 (Sec/Twn/Rng; Lat/Long)	From mouth to headwaters.
Turner Creek	Stream gage will be installed at RM 4.2 (Sec/Twn/Rng; Lat/Long)	From mouth to headwaters.
Gilligan Creek	Stream gage will be installed at RM 3.2 (Sec/Twn/Rng; Lat/Long)	From mouth to headwaters.
Salmon Creek	Staff gage periodically recorded will be installed at RM 4.3 (Sec/Twn/Rng; Lat/Long)	From mouth to headwaters.

*Other additional control stations and instream flows may be established in WRIAs 3 & 4 to improve water management.

(2) Instream flows are established for the stream management units in WAC 173-503-040(1) as follows (See Figures 1 through 3):

Instream Flows as measured at USGS Sta. #12-2005-00
(Instantaneous cubic feet per second)

Month	Day	USGS Sta. #12-2005-00 Skagit River
Jan.	1–31	10,000
Feb.	1–29	10,000
Mar.	1–31	10,000
Apr.	1–30	12,000
May	1–31	12,000
Jun.	1–30	12,000
Jul.	1–31	10,000
Aug.	1–31	10,000
Sep.	1–30	10,000
Oct.	1–31	13,000
Nov.	1–15	13,000

	16–30	11,000
Dec.	1–15	11,000
	16–31	10,000

Instream Flows for Cultus Mountain Tributaries, WRIA 3
(Instantaneous cubic feet per second)

Month	Day	RM 3.4 Mundt Creek	RM 4.2 Turner Creek	RM 3.2 Gilligan Creek	RM 4.3 Salmon Creek
Jan.	1-31	6.4	7.9	19.8	4.0
Feb.	1-29	6.4	5.4	19.8	4.0
Mar.	1-15	6.4	5.4	19.8	4.0
	16-31	9.4	5.4	27.7	4.0
Apr.	1-30	9.4	7.9	31.7	4.0
May	1-31	9.4	7.9	31.7	1.4
Jun.	1-30	9.4	4.9	31.7	1.4
Jul.	1-31	7.6	4.9	39.6	1.4
Aug.	1-31	7.6	4.9	39.6	1.4
Sep.	1-30	7.6	4.9	39.6	4.0
Oct.	1-31	7.6	7.9	23.8	4.0
Nov.	1-30	9.4	7.9	27.7	4.0
Dec.	1-31	9.4	7.9	27.7	4.0

(3) Instream flow hydrograph.

Figure 1

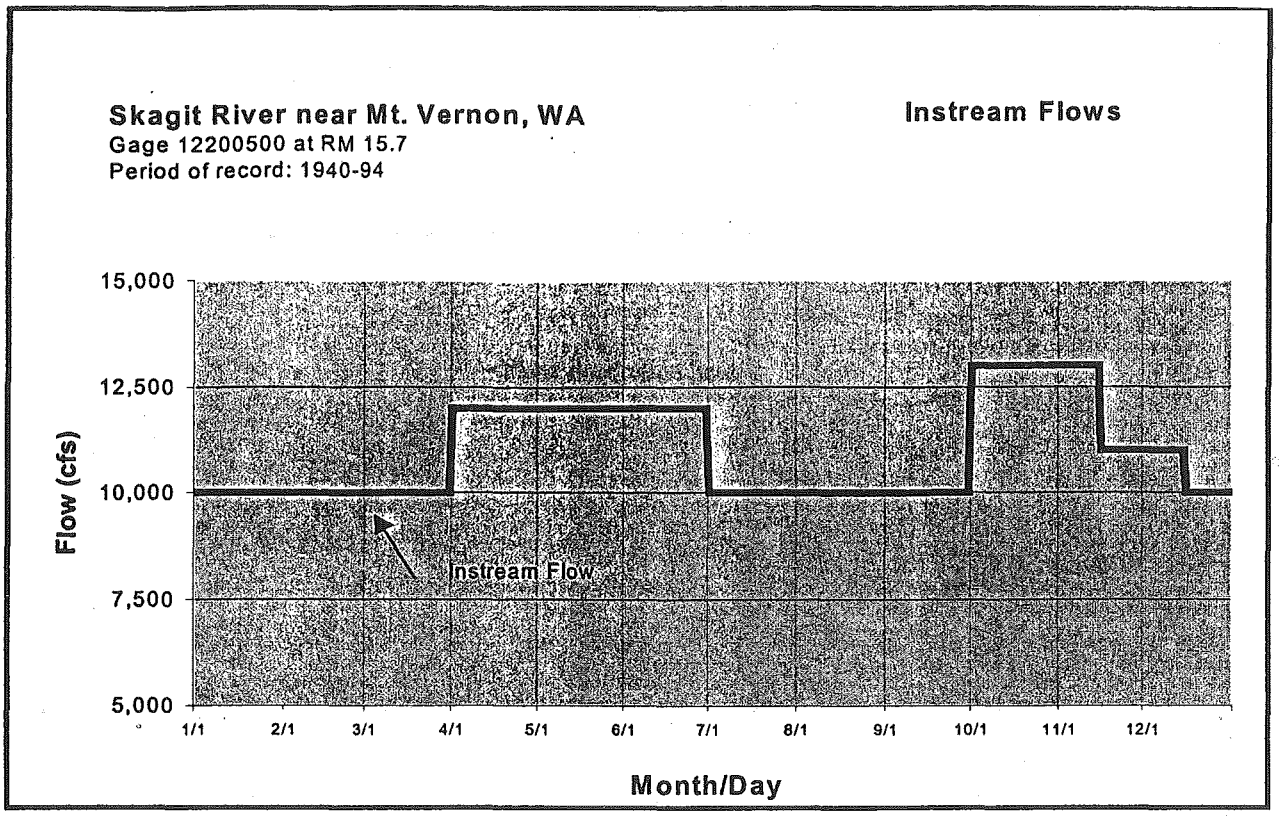


Figure 2

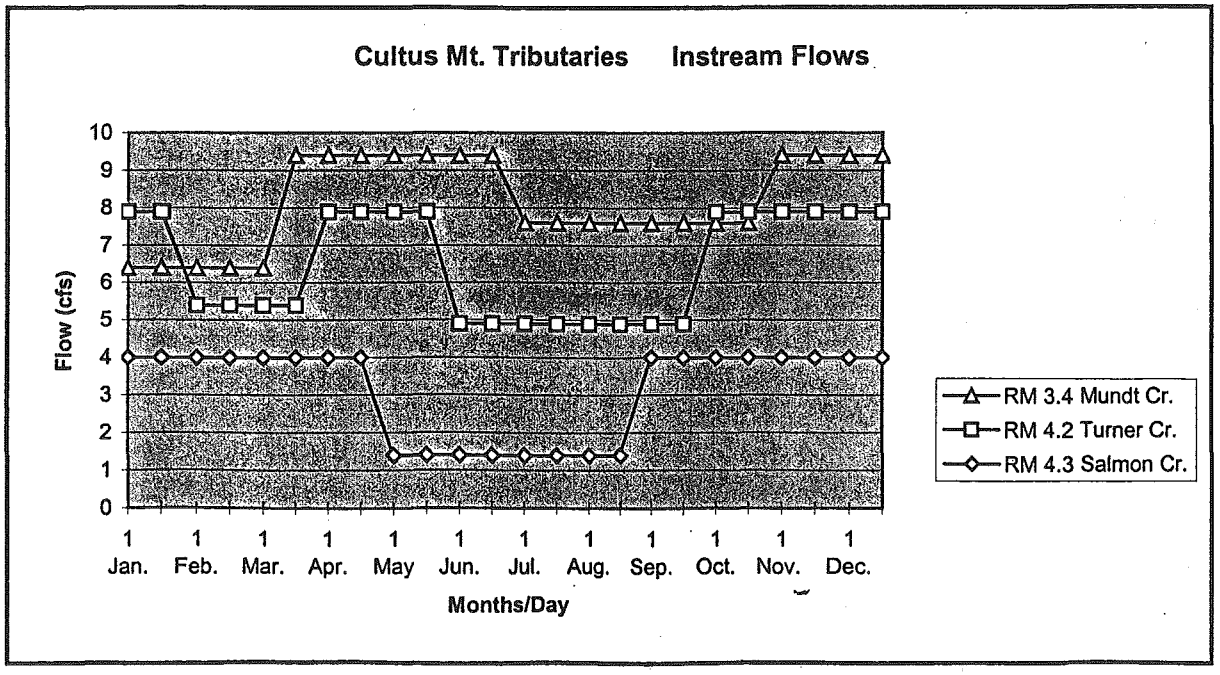
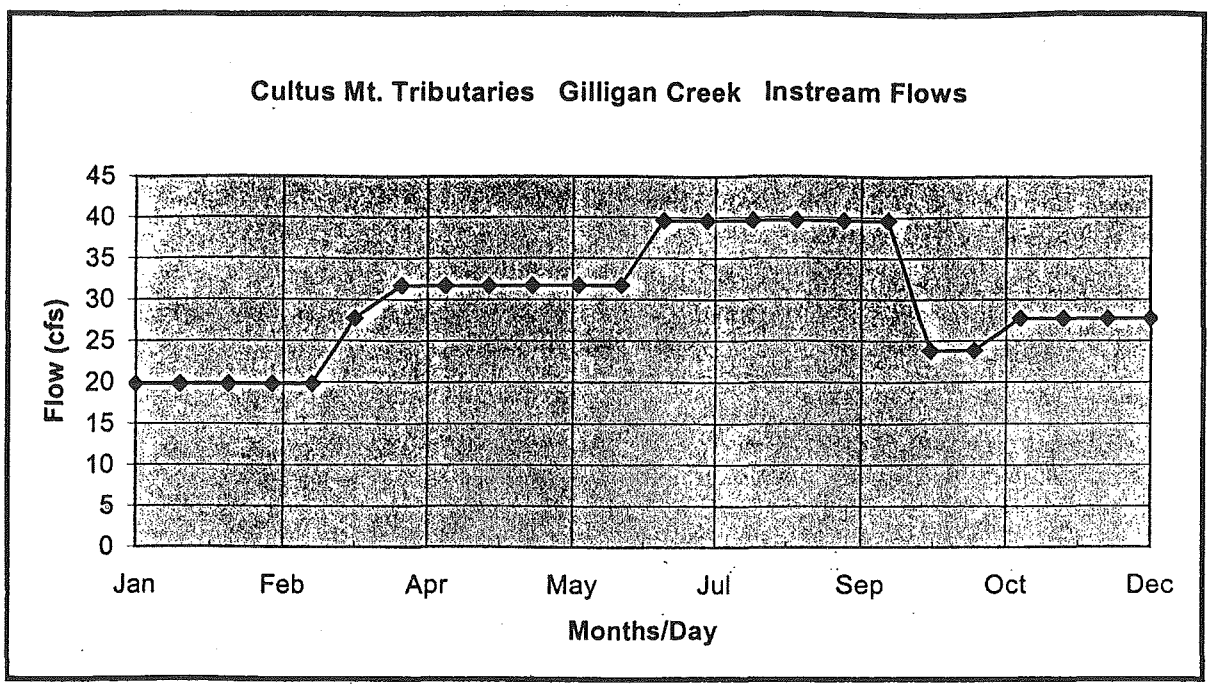


Figure 3



(4) The instream flow hydrographs, as represented in Figures 1 through 3 in WAC 173-503-040(3) shall be used for identification of instream flows.

(5) Future consumptive water right permits issued hereafter for diversion of surface water in the Lower and Upper Skagit (WRIA 3 and 4) and perennial tributaries, and withdrawal of ground water in hydraulic continuity with surface water in the Skagit River and perennial tributaries, shall be expressly subject to instream flows established in WAC 173-503-040 (1) through (3) as measured at the appropriate gage, and also subject to WAC 173-503-060.

(6) Future consumptive water rights issued to applications pending at the effective date of the regulation are superior in priority date but shall be conditioned on the instream flows established in WAC 173-503-040 (1) through (3). (RCW 90.03.247)

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-040, filed 3/14/01, effective 4/14/01.]

WAC 173-503-050 Water availability determination. (1) The department has made a determination that two hundred cubic feet per second is available to be appropriated through ground water withdrawal or surface water diversion for further instantaneous consumptive appropriation in the Lower and Upper Skagit watershed (WRIA 3 and 4). These waters are available for appropriation, subject to existing rights, exemptions in WAC 173-503-070, and instream flows in WAC 173-503-040(2). This determination was based upon review of existing water right records and existing water use, and is consistent with the findings section (WAC 173-503-030) of this regulation.

(2) The department advises that water rights issued to appropriate these waters determined to be available by this rule will be interruptible rights.

(3) After these instantaneous diversion or withdrawal of the 200 cfs quantities identified in subsection (1) of this section have been allocated by ecology, the Lower and Upper Skagit Watershed (WRIA 3 and 4) shall be withdrawn from further consumptive appropriations. This rule may be reopened to further consumptive appropriation only if further information demonstrates that such appropriations can be made consistent with the finding section (WAC 173-503-030) and the instream flow section (WAC 173-503-040). If further information demonstrates that the amount in the availability determination set forth in subsection (1) of this section should have been less than two hundred cubic feet per second, ecology will not be bound by the two hundred cubic feet per second number when processing individual water right applications.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-050, filed 3/14/01, effective 4/14/01.]

WAC 173-503-060 Ground water. If the department determines that there is hydraulic continuity between surface water and the proposed ground water source, a water right permit or certificate shall not be issued unless the department determines that withdrawal of ground water from the source aquifer would not interfere with stream flows during the period of stream closure or with maintenance of minimum instream flows. If such findings are made, then applications to appropriate public ground waters may be approved subject to the flows established in WAC 173-503-040(2).

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-060, filed 3/14/01, effective 4/14/01.]

WAC 173-503-070 Exemptions. (1) Nothing in this chapter shall affect existing water rights, including perfected riparian rights, federal Indian and non-Indian reserved rights, or other appropriative rights existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any hydroelectric or water storage reservoir or related facilities.

(2) Nonconsumptive uses which are compatible with the intent of this chapter may be approved.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-070, filed 3/14/01, effective 4/14/01.]

WAC 173-503-080 Policy statement for future permitting actions. (1) No rights to divert or store public surface waters of WRIA 3 and 4 which would conflict with the provisions of this chapter shall hereafter be granted, except as provided in RCW 90.54.020 (3)(a).

(2) Consistent with the provisions of chapter 90.54 RCW, it is the policy of the department to preserve an appropriate minimum instream flow in all perennial streams and rivers as well as the water levels in all lakes in the Lower and Upper Skagit watershed (WRIA 3 and 4) by encouraging the use of alternative sources of water which include:

(a) Reuse;

(b) Artificial recharge and recovery;

(c) Conservation; and

(d) Acquisition of existing water rights.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-080, filed 3/14/01, effective 4/14/01.]

WAC 173-503-090 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 43.83B.-335, 90.03.400, 90.03.410, 90.03.600, 90.44.120 and 90.44.-130.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-090, filed 3/14/01, effective 4/14/01.]

WAC 173-503-100 Regulation review. Review of the rules in this chapter may be initiated by the department of ecology whenever new information is available, a change in conditions occurs, or statutory modifications are enacted that are determined by the department of ecology to require review.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-100, filed 3/14/01, effective 4/14/01.]

Chapter 173-507 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—SNOHOMISH RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 7

WAC

WAC 173-507-010 General provision. These rules apply to surface waters within the Snohomish River basin,

WRIA-7 (see WAC 173-500-040). Chapter 173-500 WAC, the general rules of the department of ecology for the implementation of the comprehensive water resources program, applies to this chapter 173-507 WAC.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-010, filed 9/6/79.]

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

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Affected Stream Reach Including Tributaries
12.1330.00 So. Fk. Skykomish River	51.6 28-27-10E	From confluence with N. Fk. Skykomish River to headwaters.
12.1381.50 Sultan River	5.1 17-28-8E	From mouth to headwaters.
12.1411.00 Skykomish River	25.0 12-27-6E	From mouth to headwaters, excluding So. Fk. Skykomish River and Sultan River.
12.1430.00 No. Fk. Snoqualmie	2.2 26-24-8E	From mouth to headwaters.
12.1445.00 Snoqualmie River	40.0 19-24-8E	From Snoqualmie Falls to headwaters, excluding No. Fork Snoqualmie River.
12.1485.00 Tolt River	8.7 31-26-8E	From mouth to headwaters.
12.1490.00 Snoqualmie River	23.0 9-25-7E	From confluence with Harris Creek to Snoqualmie Falls, excluding Tolt River.
12. Snoqualmie River	2.5 26-27-6E	From mouth to confluence with Harris Creek, including Harris Creek.
12.1554.00 Pilchuck River	1.9 18-28-6E	From mouth to headwaters.
12.1508.00 Snohomish River	20.4 16-27-6E	From influence of mean annual high tide at low base flow levels to confluence with Skykomish River and Snoqualmie River, excluding Pilchuck River.

(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)

Month	Day	12.1330.00 So. Fk. Skykomish	12.1411.00 Skykomish	12.1430.00 No. Fk.* Snoqualmie	No. Fk.** Snoqualmie
Jan.	1	900	2200	260	200
	15	900	2200	260	200
Feb.	1	900	2200	260	200
	15	900	2200	260	200
Mar.	1	900	2200	260	200
	15	900	2200	300	200
Apr.	1	1100	2650	300	200
	15	1250	3250	300	200
May	1	1250	4000	300	200
	15	1250	4900	300	200
June	1	1250	4900	300	200
	15	1250	4900	300	200
July	1	1250	3250	300	200
	15	950	2170	195	140

INSTREAM FLOWS IN THE SNOHOMISH RIVER BASIN
(in Cubic Feet per Second)

Month	Day	12.1330.00 So. Fk. Skykomish	12.1411.00 Skykomish	12.1430.00 No. Fk.* Snoqualmie	No. Fk.** Snoqualmie
Aug.	1	650	1450	130	100
	15	450	1000	130	100
Sept.	1	450	1000	130	100
	15	450	1000	130	100
Oct.	1	550	1300	130	130
	15	700	1700	165	165
Nov.	1	900	2200	210	200
	15	900	2200	260	200
Dec.	1	900	2200	260	200
	15	900	2200	260	200

* 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.

Month	Day	12.1381.50 Sulton	12.1445.00 Snoqualmie (above Falls)	12.1485.50 Tolt River*	Tolt River**
Jan.	1		1550	280	190
	15		1550	280	190
Feb.	1		1550	280	190
	15		1550	280	190
Mar.	1		1550	280	190
	15		1550	280	190
Apr.	1		1550	280	190
	15		1550	280	190
May	1		1550	280	190
	15		1550	280	190
June	1		1550	280	190
	15		1550	280	165
July	1		1550	280	140
	15		1100	240	120
Aug.	1		770	170	120
	15		600	120	120
Sept.	1		600	120	120
	15		600	120	120
Oct.	1		820	190	185
	15		1100	280	190
Nov.	1		1550	280	190
	15		1550	280	190
Dec.	1		1550	280	190
	15		1550	280	190

* 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.

Month	Day	12.1490.00 Snoqualmie (Carnation)	12. Snoqualmie (mouth)	12.1554.00 Pilchuck R.	12.1508.00 Snohomish R.
Jan.	1	2500	2800	300	6000
	15	2500	2800	300	6000
Feb.	1	2500	2800	300	6000
	15	2500	2800	300	6000
Mar.	1	2500	2800	300	6000
	15	2500	2800	300	6000
Apr.	1	2500	2800	300	6000
	15	2500	2800	300	6500

Month	Day	12.1490.00 Snoqualmie (Carnation)	12. Snoqualmie (mouth)	12.1554.00 Pilchuck R.	12.1508.00 Snohomish R.
May	1	2500	2800	300	7200
	15	2500	2800	300	8000
June	1	2500	2800	300	8000
	15	2500	2800	300	8000
July	1	1850	2180	220	5700
	15	1300	1550	160	4000
Aug.	1	950	1080	120	2800
	15	700	800	85	2000
Sept.	1	700	800	85	2000
	15	700	800	85	2000
Oct.	1	1050	1200	130	2900
	15	1650	1850	200	4000
Nov.	1	2500	2800	300	6000
	15	2500	2800	300	6000
Dec.	1	2500	2800	300	6000
	15	2500	2800	300	6000

(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), § 173-507-020, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-020, filed 9/6/79.]

WAC 173-507-030 Surface water source limitations to further consumptive appropriations. (1) The department, having determined further consumptive appropriations would harmfully impact instream values, adopts instream flows as follows confirming surface water source limitations previously established administratively under authority of chapter 90.03 RCW and RCW 75.20.050.

LOW FLOW LIMITATIONS

Stream	Limitation	Point of Measurement
Evans Creek, Tributary to Lake Beecher	No diversion when flow drops below 2.0 cfs.	800 ft. So. and 800 ft. east of center of Sec. 7, T. 27 N., R. 6 E.W.M.
Foye Creek Tributary to Riley Slough	No diversion when flow drops below 4.0 cfs.	750 ft. So. and 325 ft. east of N1/4 cor. of Sec. 18, T. 27 N., R. 6 E.W.M.
French Creek, Tributary to Snohomish River	No diversion when flow drops below 0.75 cfs.	125 ft. No. and 1300 ft. west of E1/4 of Sec. 20, T. 28 N., R. 6 E.W.M.
Langlois Creek Tributary to Tolt River	No diversion when flow drops below 3.0 cfs.	1040 ft. No. and 1250 ft. east of SW1/4 cor. of Sec. 22, T. 25 N., R. 7 E.W.M.
Tate Creek, Tributary to No. Fk. Snoqualmie River	No diversion when flow drops below 2.0 cfs.	900 ft. east and 870 ft. No. of W1/4 cor. of Sec. 26, T. 24 N., R. 8 E.W.M.
Tulalip Creek, Tributary to Tulalip Bay	No diversion when flow drops below 2.5 cfs.	1125 ft. west and 125 ft. No. of S1/4 cor. of Sec. 22, T. 30 N., R. 4 E.W.M.
Unnamed Stream (Coon Creek), Tributary to Pilchuck River.	No diversion when flow drops below 1.0 cfs.	480 ft. No. and 240 ft. west of center of Sec. 19, T. 30 N., R. 7 E.W.M.
Unnamed Stream (Coon Creek), Tributary to Pilchuck River	One-half of low flow must be bypassed.	800 ft. east and 1100 ft. So. of W1/4 cor. of Sec. 19, R. 30 N., R. 7 E.W.M.
Unnamed Stream, Tributary to Cherry Creek	No diversion when flow drops below 1.0 cfs.	1000 ft. So. and 400 ft. west of NE cor. of Sec. 16, T. 26 N., R. 7 E.W.M.
Unnamed Stream, Tributary to McCoy Creek	No diversion when flow drops below 0.5 cfs.	600 ft. west and 100 ft. No. of SE cor. of Sec. 5, T. 27 N., R. 8 E.W.M.
Unnamed Stream, Tributary to Snoqualmie River	No diversion when flow drops below 30.0 cfs.	350 ft. west and 900 ft. No. of SE cor. of Sec. 5, T. 27 N., R. 8 E.W.M.
Unnamed Stream (Solberg Creek), Tributary to Snoqualmie River	No diversion when flow drops below 2.0 cfs.	600 ft. west and 1050 ft. No. of E cor. of Sec. 12, T. 25 N., R. 6 E.W.M.
Unnamed Stream, Tributary to Snoqualmie River	One-half of low flow must be bypassed.	500 ft. So. and 1120 ft. east of center Sec. 28, T. 25 N., R. 7 E.W.M.
Unnamed Stream, Tributary to Snoqualmie River	No diversion when flow falls below 1.0 cfs.	600 ft. No. of E1/4 cor. of Sec. 28, T. 25 N., R. 7 E.W.M.
Wood Creek, Tributary to Snohomish River	No diversion when flow drops below 0.75 cfs.	335 ft. No. and 130 ft. east of S1/4 cor. of Sec. 8, T. 28 N., R. 5 E.W.M.
Woods Creek Tributary to Skykomish River	No diversion when flow drops below 11.0 cfs.	Immediately below confl. of West Fork in SE1/4NW1/4 Sec. 33, T. 28 N., R. 7 E.W.M.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 6.0 cfs.	Immediately above said confl. of West Fork.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 2.5 cfs.	Immediately above confl. of Roesigner Cr. in NE1/4NW1/4 of Sec. 3, T. 28 N., R. 7 E.W.M.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 0.5 cfs.	Roesigner Creek, immediately above said confl. with Woods Creek.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 5.0 cfs.	West Fork, immediately above said confl. with Woods Creek.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 2.5 cfs.	West Fork when it crosses the No. line of Sec. 5, T. 28 N., R. 7 E.W.M.
Unnamed Lake (Morris Lake), Tributary to Horseshoe Lake	No diversion when flow drops below 1.0 cfs.	Lake outlet at NE1/4NE1/4 of Sec. 9, T. 25 N., R 7 E.W.M.

Note: Affected stream reaches extend from mouth to headwaters and include all tributaries in the contributing drainage area unless specifically excluded.

(2) The department, having determined there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the following streams to further consumptive appropriation for the periods indicated. These closures confirm surface water source limitations previously established administratively under authority of chapter 90.03 RCW and RCW 75.20.050.

SURFACE WATER CLOSURES

Stream	Date of Closure	Period of Closure
Griffin Creek, Tributary to Snoqualmie River	9/22/53	All year
Harris Creek, Tributary to Snoqualmie River	1/20/44	All year
Little Pilchuck Creek, Tributary to Pilchuck River	5/6/52	All year
May Creek, Tributary to Wallace River	10/13/53	All year
Patterson Creek, Tributary to Snoqualmie River	2/19/52	All year
Quilceda Creek, Tributary to Ebey Slough	6/10/46	All year
Raging River, Tributary to Snoqualmie River	9/20/51	All year
Unnamed Stream (Bodell Creek), Tributary to Pilchuck River	9/6/51	All year

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-030, filed 9/6/79.]

WAC 173-507-040 Ground water. In future permitting actions relating to ground water withdrawals, the natural interrelationship of surface and ground waters shall be fully considered in water allocation decisions to assure compliance with the meaning and intent of this regulation.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-040, filed 9/6/79.]

WAC 173-507-050 Exemptions. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) Domestic inhouse use for a single residence and stock watering, except that related to feed lots, shall be exempt.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-050, filed 9/6/79.]

WAC 173-507-060 Future rights. No right to divert or store public surface waters of the Snohomish WRIA 7 shall hereafter be granted which shall conflict with the instream flows and closures established in this chapter. Future rights for nonconsumptive uses, subject to the conditions herein established, may be granted.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-060, filed 9/6/79.]

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 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), § 173-507-070, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-070, filed 9/6/79.]

WAC 173-507-075 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), § 173-507-075, filed 6/9/88.]

WAC 173-507-080 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), § 173-507-080, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-080, filed 9/6/79.]

Chapter 173-508 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—CEDAR-SAMMAMISH BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 8

WAC

WAC 173-508-010 Authority. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resource management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-010, filed 9/6/79. Formerly chapter 173-30 WAC.]

WAC 173-508-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in Lake Washington drainages with instream flows and levels necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, navigational values, and to preserve water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-020, filed 9/6/79.]

WAC 173-508-030 Closures and instream flows. (1) The department of ecology has determined that additional diversions of water from the Lake Washington drainage system would deplete instream flows and lake levels required to support the uses described in WAC 173-508-020. Therefore, lakes and streams contributing to the Lake Washington drainage above the Hiram M. Chittenden Locks, excluding the

Cedar River drainage, shall be closed to further consumptive appropriations. Regulation to protect instream flows in the Cedar River and its tributaries shall be undertaken pursuant to WAC 173-508-060.

(2) WAC 173-508-040—Table 1, includes specific named and unnamed surface water sources in water resource inventory area 8 with restrictions indicated. All tributaries in the Lake Washington drainage not specifically included in Table 1 are closed.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-030, filed 9/6/79.]

WAC 173-508-040 Table 1—Cedar-Sammamish basin—WRIA 8.

Stream or Lake	Tributary to	Restriction
(Little) Bear Creek	Sammamish River	Closure
Cedar River (including tributaries)	Lake Washington	Instream Flow Levels
Coal Creek	Lake Washington	Closure
Cottage Lake Creek and tributaries,	Sammamish River	Closure
Bear Creek		Closure
Evans Creek		Closure
Haller Lake	Thornton Creek	Closure
Issaquah Creek	Sammamish Lake	Closure
N. Fork Issaquah		Closure
E. Fork Issaquah		Closure
Unnamed Stream		Closure
Fifteen Mile Creek		Closure
Holder Creek		Closure
Carey Creek		Closure
Lake Washington	Puget Sound	Closure
Sammamish River	Lake Washington	Closure
Lake Sammamish	Sammamish River	Closure
Tibbetts Creek	Sammamish Lake	Closure
Pine Lake and Unnamed Stream (Pine Lake Creek)	Sammamish Lake	Closure
Laughing Jacobs Creek	Sammamish Lake	Closure
Larson Lake (including tributaries)	Lake Washington	Closure
Lyon Creek	Lake Washington	Closure
Martha Lake	Swamp Creek	Closure
May Creek	Lake Washington	Closure
McAleer Creek		Closure
Lake Ballinger (McAleer Lake)	Lake Washington	Closure
Mercer Slough	Lake Washington	Closure
Kelsey Creek		Closure
Kinsley Creek		Closure
Mercer Slough Creek		Closure
North Creek	Sammamish River	Closure
Silver Lake		Closure
Pipers Creek	Puget Sound	Closure
Rock Creek	Cedar River	Closure
Swamp Creek	Sammamish River	Closure
Unnamed Springs	Sammamish Lake	Closure
Unnamed Stream (11-26-3E)	Puget Sound	Closure
Unnamed Stream (12-24-5E)	Sammamish Lake	Closure
Unnamed Stream (Jones Creek)	Cedar River	Closure
Unnamed Stream (Juanita Creek)	Lake Washington	Closure
Unnamed Stream (Northrup Creek)	Lake Washington	Closure
Unnamed Stream (Wildcat Creek)	Sammamish River	Closure
Thornton Creek	Lake Washington	Closure

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-040, filed 9/6/79.]

WAC 173-508-050 Ground water. In future permitting actions relating to ground water withdrawals, the natural interrelationship of surface and ground waters shall be fully considered in water allocation decisions to assure compliance with the intent of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-050, filed 9/6/79.]

WAC 173-508-060 Instream flows for the Cedar River. (1) The instream flows established in this section apply to waters of the Cedar River and affect the entire watershed drained by the Cedar River including all tributaries thereto.

(2) Instream flows established in this section shall be measured at the existing U.S. Geological Survey gaging station No. 12.1190.00 on the Cedar River at Renton, Washington.

(3) Except as provided herein (critical year flows), water flows in the Cedar River and tributaries thereto shall, to the extent depletion under existing rights and natural flow conditions permit, be maintained throughout each year at levels which, during the time periods designated, do not fall below the following measurements:

(a) **Normal Year Flow**

January 1 to June 20:	370 cfs
June 20 to July 15:	Linear decrease from 370 cfs on June 20 to 130 cfs on July 15
July 15 to September 10:	130 cfs
September 10 to September 20:	Linear increase from 130 cfs on September 10 to 200 cfs on September 20
September 20 to October 1:	200 cfs
October 1 to October 10:	Linear increase from 200 cfs on October 1 to 370 cfs on October 10
October 10 to January 1:	370 cfs

Normal year flows must be maintained at all times unless a critical condition is declared by the director. If natural Cedar River flows fall below the 1 in 10 year Cedar River flow frequency, the director, or his designee, may authorize flows below the normal year flows, but not lower than the critical year flow except where a declaration of overriding considerations of public interest is made by the director. All requests to deplete below the established instream flow level will be considered on a case-by-case basis.

(b) **Critical Year Flow**

January 1 to June 15:	250 cfs
June 15 to July 1:	Linear decrease from 250 cfs on June 15 to 110 cfs on July 1
July 1 to October 1:	110 cfs
October 1 to November 1:	Linear increase from 110 cfs on October 1 to 250 cfs on November 1
November 1 to January 1:	250 cfs

Critical year flows represent flows below which the department believes substantial damage to instream values will occur. Critical year flows are expected to be met unless natural Cedar River flows fall below the one in fifty year Cedar River flow frequency.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-060, filed 9/6/79.]

WAC 173-508-070 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), § 173-508-070, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-070, filed 9/6/79.]

WAC 173-508-080 Exemptions. (1) Nothing in this chapter shall affect any existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter; nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) Domestic inhouse use for a single residence and stock watering, except that related to feedlots, shall be exempt from this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-080, filed 9/6/79.]

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. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-090, filed 9/6/79.]

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.]

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 43.21B, 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

WAC 173-509-010 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Green-Duwamish drainage basin with instream flows and levels necessary for preservation and protection of wildlife, fish, scenic, aesthetic and other environmental values, recreational and navigational values, and to preserve water quality. Nothing in this chapter shall preclude the future issuance of regulations and/or signing of intergovernmental agreements which attempt to optimize the total public use of the basin water resources, providing they are consistent with the intent of this chapter. The instream flow rules presented here are for preservation of the existing resources so that when future planning or development occurs on this river these resources will be available.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-010, filed 6/6/80.]

WAC 173-509-015 Background. The Green-Duwamish River basin has been modified significantly since settlement of the area. Urbanization in the lower basin has influenced water quality and diversions for municipal and industrial water supply have altered the stream flow of the Green-Duwamish River. Ground water has been developed for consumptive use within the basin. The White River originally had a confluence with the Green River near Auburn but since 1906 it has been diverted into the Puyallup River. A dam on the Black River near Tukwila prevents water from the Green River from flowing into Lake Washington during periods of high flow. In 1913 the city of Tacoma commenced diversions for municipal and industrial uses. Since 1962 the Green-Duwamish River has been influenced by the operation of the Howard A. Hanson Dam, a Corps of Engineers flood control project with authorization to provide instream flow maintenance of at least 110 cfs for fisheries conservation purposes. The operation has also considered drinking water quality requirements of the city of Tacoma.

The Green-Duwamish River basin is a natural rearing and spawning area primarily for steelhead trout and chinook, coho and chum salmon. Fish hatcheries are located on tributary streams and these contribute to total numbers of fish produced by the river system. The river itself and the shoreline also offer easily accessible recreational opportunities.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-015, filed 6/6/80.]

WAC 173-509-020 General provision. These rules apply to all waters within the Green-Duwamish River basin, WRIA 9 (see WAC 173-500-040). This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program). The provisions of this chapter apply, as a matter of state law, to future water right authorizations issued pursuant to the state's water rights codes.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-020, filed 6/6/80.]

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:

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Affected Stream Reach Including Tributaries
12.1130.00 Green River near Auburn, WA	32.0 17-21-5	From influence of mean annual high tide at low instream flow levels (approximately River Mile 11.0) to USGS Gage #12.1067.000
12.1067.00 Green River near Palmer, WA	60.4 13-21-7	From USGS Gage #12.1067.000 to headwaters.

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:

INSTREAM FLOWS FOR FUTURE WATER RIGHTS IN THE GREEN-DUWAMISH RIVER BASIN
(in Cubic Feet per Second)

Month	Day	12,1130.00 Normal Year Green River Near Auburn	12,1067.00 Normal Year Green River Near Palmer	12.1067.00 Critical Year Green River Near Palmer
Jan.	1	650	300	300
	15	650	300	300
Feb.	1	650	300	300
	15	650	300	300
Mar.	1	650	300	300
	15	650	300	300
Apr.	1	650	300	300
	15	650	300	300
May	1	650	300	300
	15	650	300	300
June	1	650	300	300
	15	650	300	210
July	1	550	300	150
	15	300	150	150
Aug.	1	300	150	150
	15	300	150	150
Sept.	1	300	150	150
	15	300	150	150
Oct.	1	300	190	150
	15	350	240	150
Nov.	1	550	300	190
	15	550	300	240
Dec.	1	650	300	300
	15	650	300	300

(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

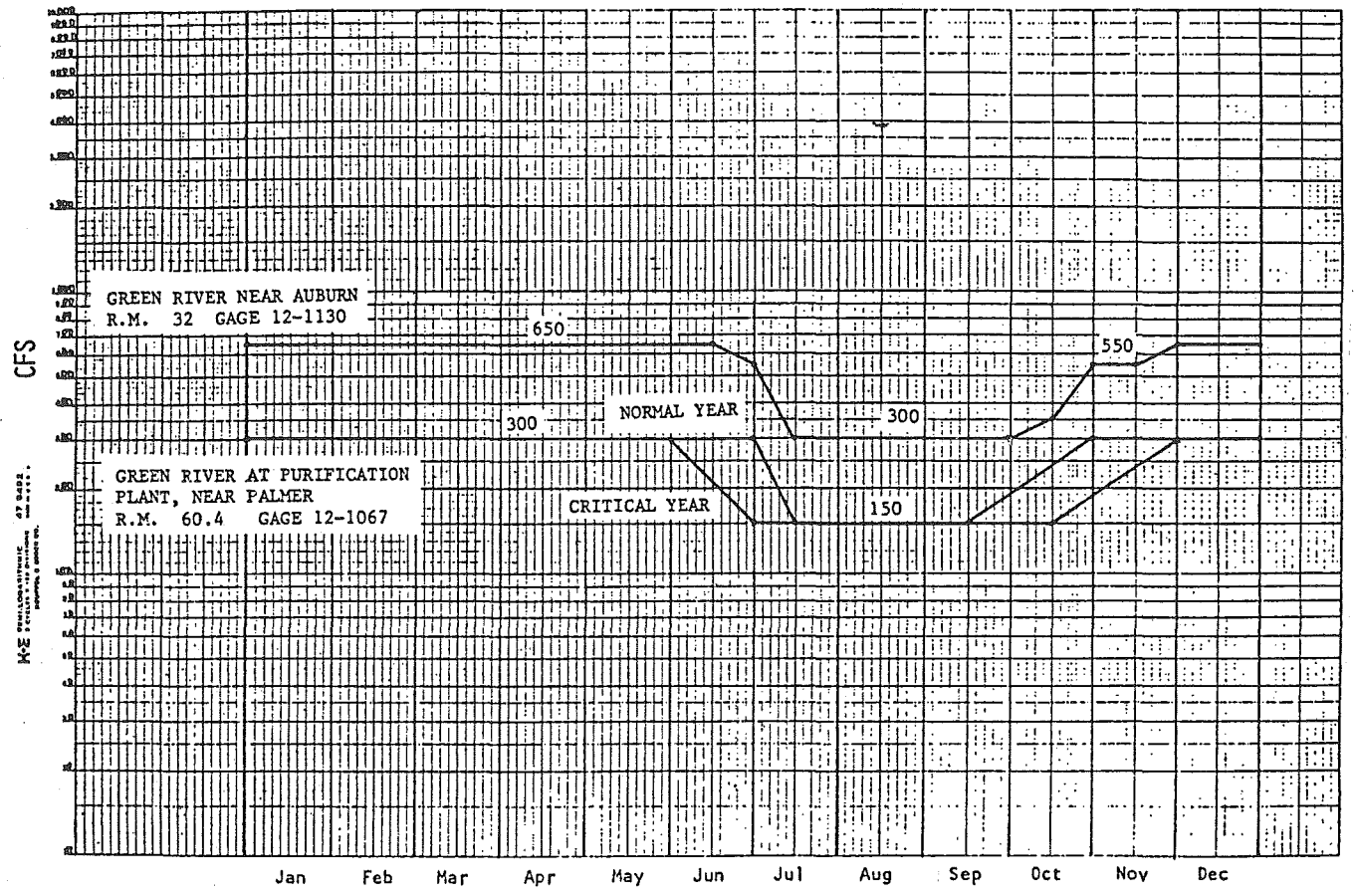
resources shall be evaluated at least every 7 days to see if additional deviation is warranted. Before allowing deviation from the normal year instream flows, water conservation practices and use of other sources shall be considered.

(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



(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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-509-030, filed 6/9/88. Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-030, filed 6/6/80.]

WAC 173-509-040 Surface water source limitations to further consumptive appropriations. (1) The department, having determined there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the following streams to further consumptive appropriation for the periods indicated. These closures confirm surface water source limitations previously established administratively under authority of chapter 90.03 RCW and RCW 75.20.050.

SURFACE WATER CLOSURES

Stream	Date of Administrative Closure	Period of Administrative Closure
All tributaries of Green River SE1/4SE1/4 sec. 14, T.32 N., R.4E.	8/19/53	All year
Deep Creek (including Hyde Lk.), tributary to Deep Lake NW1/4SE1/4 sec. 18, T.21N., R.7E.	4/17/53	All year
Unnamed stream (Des Moines Creek, Tributary to Puget Sound SW1/4SW1/4 sec. 8, T.22N., R.4E.	8/22/52	All year
Unnamed stream (Garrison Creek), Tributary to Black River (indirect) NW1/4NW1/4NW1/4 sec. 6, T.22N., R.5E.	10/18/51	All year
Unnamed stream (Miller Creek) (Maybrook Creek), Tributary to Puget Sound NE1/4NE1/4 sec. 36, T.23N., R.3E.	1/7/46	All year
Unnamed stream (Springbrook Creek), Tributary to Black River NE1/4SE1/4SW1/4 sec. 13, T.23N., R.4E.	11/14/45	All year

(2) The department, having determined that maximum lake levels have been established by court decree for certain lakes in WRIA 9, adopts the following lake levels. These maximum lake levels confirm lake levels previously established by order of the superior court for King County.

MAXIMUM LAKE LEVELS

Lakes	Lake Level Established	Date of Order
Angle Lake	349.27 ft. at MSL	4/21/75
Star Lake 077	324.46 ft. at MSL	9/20/50
Lake Sawyer (Tributary to Covington Creek)	518.94 ft. at MSL	8/5/52

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-040, filed 6/6/80.]

WAC 173-509-050 Ground water. Future groundwater withdrawal permits will not be affected by this chapter unless such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-050, filed 6/6/80.]

WAC 173-509-060 Future rights. No right to divert or store public waters of the Green-Duwamish River basin, WRIA 9, shall be granted which shall conflict with the purposes of this chapter: Provided however, Withdrawals of water which would conflict with said purposes may be authorized in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-060, filed 6/6/80.]

WAC 173-509-070 Exemptions. (1) Nothing in this chapter shall affect water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities, including but not limited to: (a) Howard Hanson Dam storage and operation as authorized in the Flood Control Act of May 17, 1950; (b) any existing right the city of Tacoma may have.

(2) Domestic inhouse use for a single residence and stock watering, except that related to feed lots, shall be exempt from the provisions of this chapter.

(3) Storage projects may be approved if they are not in conflict with the purposes of this chapter.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-070, filed 6/6/80.]

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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-509-080, filed 6/9/88. Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-080, filed 6/6/80.]

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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-509-085, filed 6/9/88.]

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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-509-090, filed 6/9/88. Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-090, filed 6/6/80.]

WAC 173-509-100 Implementation. In the event the COE is authorized to change the operation of Howard Hanson Dam in order to meet the stream flows established in this chapter and so advises the director, these regulations shall be reviewed by the department within 180 days of the COE authorization to determine, what, if any, amendments are required to maintain the integrity and purpose of this chapter.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-100, filed 6/6/80.]

Chapter 173-510 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—PUYALLUP RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 10

WAC

WAC 173-510-010 General provision. These rules apply to waters within the Puyallup River basin, WRIA 10, as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-010, filed 3/21/80.]

WAC 173-510-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Puyallup River basin with instream flows and levels necessary to provide protection for wildlife, fish, scenic-aesthetic, environmental values, recreation, navigation, and to preserve high water quality standards.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-020, filed 3/21/80.]

WAC 173-510-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township, and Range	Affected Stream Reach(es)
12-0965.00 Upper Puyallup River	12.2 25-20-4E	Confluence with Puyallup River to the headwaters including all tributaries
12-0957.00 Carbon River	0.1 13-19-4E	From the confluence with the White River to the headwaters including all tributaries, excluding the Carbon River.
12-1015.00 Lower Puyallup River	6.6 20-20N-R4E	From the influence of mean annual high tide at low base flow levels to the confluence with the White River including all tributaries and excluding the White River.

(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

		(cubic feet per second)		
Month	Day	12-0965.00 Puyallup River (At Alderton)	12-1015.00 Puyallup River	12-0957.00 Carbon River
Jan	1	700	1400	600
	15	700	1400	550
Feb	1	750	1400	550
	15	800	1500	550
Mar	1	800	1600	550
	15	850	1700	550
Apr	1	900	1800	600
	15	950	1900	700
May	1	950	2000	900
	15	1000	2000	900
Jun	1	1050	2000	600
	15	1050	2000	500
Jul	1	1050	2000	450
	15	1050	1750	400
Aug	1	900	1500	350
	15	800	1300	350
Sep	1	600	1150	350
	15	500	1000	350
Oct	1	500	1000	350
	15	500	1000	550
Nov	1	600	1000	550
	15	700	1100	600
Dec	1	700	1200	700
	15	700	1300	700

(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. 88-13-037 (Order 88-11), § 173-510-030, 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 173-510-040 Surface water source limitations to further consumptive appropriations. (1) The department of ecology, having determined unlimited consumptive appropriations would harmfully impact instream values, adopts instream flows as follows confirming surface water source limitations previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050.

LOW FLOW LIMITATIONS

Stream Number Stream Name Section, Township, Range of Stream Mouth or Lake Outlet	Limitation
10.0594 Unnamed stream, tributary to Puyallup River NE1/4SE1/4, Sec. 8, T.18N, R.5E	No diversion when flow falls to 0.10 cfs.
10.0415 Unnamed stream, (Taylor Creek) tributary of Carbon River NW1/4SW1/4, Sec. 33, T.19N., R.5E	No diversion when flow falls to 1.0 cfs.
10.0402 Unnamed stream, (Van Ogle Creek) tributary to Puyallup River NW1/4SE1/4, Sec. 30, T.20N, R.5E	No diversion when discharge into the Puyallup River drops to 1.0 cfs.
Unnamed stream, (Canyon Creek) tributary to Puyallup River SE1/4NE1/4, Sec. 24, T. 20N, R.3E	No diversion when flow falls to 1.0 cfs.

(2) The following stream and lake closures are adopted confirming surface water source limitations previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050.

EXISTING SURFACE WATER CLOSURES

Stream Number Stream Name Section, Township, Range	Date of Closure	Period of Closure
10.0414 Voight Creek, tributary to Carbon River NW1/4SW1/4, Sec. 33, T.19N., R.5E	2/26/75	All year
10.0589 Unnamed stream (Lawrence Creek), tributary to Puyallup River NW1/4NE1/4, Sec. 25, T.19N, R.4E	2/26/75	All year
Unnamed springs, tributary to Puyallup River SE1/4,NE1/4, Sec. 35, T.20N, R.4E	12/14/64	All year
10. 0006 Hylebos Creek Hylebos Creek, drains into Commencement Bay and Puget Sound NW1/4NE1/4, Sec. 27, T.21N, R.3E	4/26/76	All year
10.0406 Fennel Creek, tributary to Puyallup River SE1/4SE1/4, Sec. 6, T.19N, R.SE	2/26/75	All year
North Lake Sec. 15, T.21N, R.4E	8/19/47	All year

(3) The department, having determined that further consumptive appropriations would harmfully impact instream values, closes the following streams and lakes in WRIA 10 to further consumptive appropriations.

NEW SURFACE WATER CLOSURES

Stream Number Stream or Lake Name Section, Township, Range of Stream Mouth or Lake Outlet	Period of Closure
10.0429 South Prairie Creek and all tributaries, tributary to Carbon River SW1/4SE1/4, Sec. 27, T.19N, R.5E	All year
10.0027 Clarks Creek and all tributaries, tributary to Puyallup River NE1/4NE1/4, Sec. 19, T.20N, R.4E	All year
10.0600 Kapowsin Creek and all tributaries, tributary to Puyallup River SW1/4SW1/4, Sec. 20, T.18N, R.5E	All year

NEW SURFACE WATER CLOSURES

Stream Number Stream or Lake Name Section, Township, Range of Stream Mouth or Lake Outlet	Period of Closure
10.0031-.0397 White River and all tributaries SW1/4SE1/4, Sec 23, T.20N, R.4E	All year
Kapowsin Lake SE1/4NE1/4, Sec. 5, T.17N., R.5E	All year
10.0603-.0607 Ohop Creek and all tributaries source of Kapowsin Lake SE1/4NW1/4, Sec. 18, T.17N., R.3E	All year
10.0022 Clear Creek and all tributaries, tributary to Puyallup River NW1/4SW1/4, Sec. 11, T.20N., R.3E	All year
10.0410 Canyon Falls Creek and all tributaries, tributary to Puyallup River Sec. 7, T.19N., R.5E	All year
10.0596 Fiske Creek and all tributaries, tributary to Puyallup River SW1/4SW1/4, Sec. 17, T.18N., R.5E	All year
10.0006 Hylebos Creek and all tributaries, tributary to Commencement Bay NW1/4NE1/4, Sec. 27, T.21N., R.3E	All year
10.0620 Le Dout Creek and all tributaries, tributary to Puyallup River NW1/4NW1/4, Sec. 28, T.17N., R.6E	All year
10.0622 Niesson Creek and all tributaries, tributary to Puyallup River NE1/4SE1/4, Sec. 33, T.17N., R.6E	All year
10.0017 Wapato Creek and all tributaries, tributary to Commencement Bay NW1/4SW1/4, Sec. 27, T.21N., R.3E	All year
10.0035 Unnamed Stream (Strawberry Creek), (Salmon Creek) and all tributaries, tributary to White River NE1/4SE1/4, Sec. 13, T.20N., R.4E	All year
10.0621 Kellogg Creek and all tributaries, tributary to Puyallup River SE1/4SW1/4, Sec. 28, T.17N., R.6E	All year

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-040, filed 3/21/80.]

WAC 173-510-050 Ground water. In future permitting actions relating to ground water withdrawals, particularly from shallow aquifers, a determination shall be made as to whether the proposed withdrawal will have a direct, and measurable, impact on stream flows in streams for which closures and instream flows have been adopted (WAC 173-510-040). If the determination affirms such interrelationship, the provisions of WAC 173-510-040 shall apply.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-050, filed 3/21/80.]

WAC 173-510-060 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be

authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-060, filed 3/21/80.]

WAC 173-510-070 Exemptions. (1) Nothing in this chapter shall affect water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Domestic in-house use for a single residence and stock watering shall be exempt except that use related to feedlots.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-070, filed 3/21/80.]

WAC 173-510-080 Future rights. No rights to divert or store public surface waters of the Puyallup WRIA 10 shall hereafter be granted which shall conflict with the purpose of this chapter as stated in WAC 173-510-02 [WAC 173-510-020].

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-080, 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), § 173-510-090, 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), § 173-510-095, filed 6/9/88.]

WAC 173-510-100 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), § 173-510-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-100, filed 3/21/80.]

Chapter 173-511 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—NISQUALLY RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 11

WAC

WAC 173-511-010 General provision. These rules apply to waters within the Nisqually River basin, WRIA 11, as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-010, filed 2/2/81.]

WAC 173-511-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Nisqually River basin with instream flows and levels necessary to provide protection for wildlife, fish, scenic, aesthetic, environmental values, recreation, navigation, and to preserve water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-020, filed 2/2/81.]

WAC 173-511-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station Location, River Mile and Section, Township and Range	Affected Stream Reach
New gage Nisqually River	4.3 9, 18N, 1E	From influence of mean annual high tide at low base flow levels to the outlet of the Centralia City Light Power Plant.
12-0895-00 Nisqually River	21.8 28, 17N, 2E	From outlet of the Centralia City Light Power Plant at river mile 12.6 to Centralia City Light Power canal diversion at river mile 26.2, including all tributaries.
12-0884-00 Nisqually River	32.6 21, 16N, 3E	From the Centralia City Light Power canal diversion at river mile 26.2 to gage 12-0865-00 near the La Grande Power Plant, including all tributaries except the Mashel River.
12-0825-00 Nisqually River	57.8 29, 15N, 6E	From gage 12-0865-00 near the La Grande Power Plant to the headwaters including all tributaries.
12-0870.00 Mashel River	3.25 11, 16N, 4E	From mouth upstream to the headwaters including all tributaries.

(2) Instream flows established for the stream management unit described in WAC 173-511-030(1) are as follows:

INSTREAM FLOWS IN THE NISQUALLY RIVER BASIN
(in Cubic Feet per Second)

Month	Day	Lower Reach of the Nisqually River USGS Gage 12-* RM 4.3 RM 4.3	Bypass Reach of the Nisqually River USGS Gage 12-0895-00 RM 21.8	Mid Reach of the Nisqually River USGS Gage 12-0884-00 RM 32.6-
January	1	900	600	900
	15	900	600	900
February	1	900	600	900
	15	900	600	900
March	1	900	600	900
	15	900	600	900
April	1	900	600	900
	15	900	600	900
May	1	900	600	900
	15	900	600	900
June	1	900	500(closed)	800(closed)
	15	850	450(closed)	800(closed)
July	1	800	400(closed)	800(closed)
	15	800	400(closed)	800(closed)
August	1	800	370(closed)	800(closed)
	15	800	370(closed)	650(closed)
September	1	600	370(closed)	600(closed)
	15	600	370(closed)	600(closed)
October	1	700	550(closed)	700(closed)
	15	700	550(closed)	700(closed)
November	1	700	600	700
	15	700	600	700
December	1	800	600	800
	15	900	600	900

* New gage to be established.

Month	Day	Upper Reach of the Nisqually River USGS Gage 12-0825-00 RM 57.8	Mashel River USGS Gage 12-0870-00 RM 3.25
January	1	450	100
	15	450	100
February	1	450	100
	15	450	100
March	1	450	100
	15	450	100
April	1	450	100
	15	450	100
May	1	450	100
	15	450	80
June	1	600	80(closed)
	15	650	70(closed)
July	1	550	50(closed)
	15	500	40(closed)
August	1	450	30(closed)
	15	400	30(closed)
September	1	350	20(closed)
	15	300	20(closed)
October	1	300	20(closed)
	15	300	20(closed)
November	1	350	40
	15	400	70
December	1	450	100
	15	450	100

(3) Instream flow hydrographs, as represented in the document entitled "Nisqually River basin instream resource protection program," shall be used for identification of instream flows on those days not specifically identified in WAC 173-511-030(2).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-030, filed 2/2/81.]

WAC 173-511-040 Surface water source limitations to further consumptive appropriations. (1) The department has determined that (a) certain streams exhibit low summer flows or have a potential for going dry thereby inhibiting anadromous fish passage during critical life stages, and (b) historic flow regimes and current uses of certain other streams indicate that no water is available for additional appropriation. Based upon these determinations the following streams and lakes are closed to further appropriation for the periods indicated:

NEW SURFACE WATER CLOSURES

Stream or Lake Section, Township, and Range of Mouth or Outlet	Tributary to	Period of Closure
Mashel River NE1/4SW1/4 Sec. 29, T16N, R4E and all tributaries	Nisqually River	June 1 - Oct. 31
Red Salmon Creek (Mounts Creek) NE1/4NW1/4 Sec. 33, T19N, R1E and all tributaries	Nisqually River	April 1 - Oct. 31
Clear Creek NE1/4SE1/4 Sec. 21, T18N, R1E and all tributaries	Nisqually River	April 1 - Oct. 31
Tanwax Creek NW1/4NE1/4 Sec.20, T16N, R3E and all tributaries	Nisqually River	April 1 - Oct. 31
McAllister Creek (except Medicine Creek) NW1/4N1/4 Sec. 6, T18N, R1E and all tributaries	Puget Sound	all year
Lake Saint Clair SE1/4NW1/4 Sec. 6, T17N, R1E		all year
Toboton Creek (above Hopson Road) SW1/4SW1/4 Sec. 19, T16N, R3E and all tributaries	Nisqually River	April 1 - Nov. 30
Lackamas Creek SE1/4SE1/4 Sec. 13, T16N, R2E and all tributaries	Nisqually River	April 1 - Nov. 30
Murray Creek NW1/4NW1/4 Sec. 16, T17N, R2E	Nisqually River	April 1 - Nov. 30
Bypass Reach, Nisqually River NE1/4SE1/4 Sec. 11, T17N, R1E	Puget Sound	June 1 - Oct. 31
Mid Reach, Nisqually River SE1/4NW1/4 Sec. 1, T16N, R2E	Puget Sound	June 1 - Oct. 31

(2) The following stream and lake low flows and closures are adopted confirming surface water source limitations previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050.

EXISTING SURFACE WATER SOURCE LIMITATIONS
CURRENT ADMINISTRATIVE STATUS OF STREAMS AND LAKES
NISQUALLY BASIN, WRIA 11

Stream	Tributary to	Action	Dates
Eaton Creek SE1/4NW1/4 Sec. 6, T17N, R1E	Lake St. Clair	Closure	12/1/53
Harts Lake and outlet streams SW1/4SE1/4 Sec. 1, T16N, R2E	Nisqually River	Low Flow (0.5 cfs bypass)	10/7/44
Horn Creek SW1/4NE1/4 Sec. 1, T16N, R2E	Nisqually River	Closure	7/22/74
Muck Creek and all tributaries SW1/4SW1/4 Sec. 36, T18N, R1E	Nisqually River	Closure	5/26/48
Ohop Creek and all tributaries SW1/4NE1/4 Sec. 25, T16N, R3E	Nisqually River	Closure	2/15/52
Ohop Lake NE1/4SE1/4 Sec. 10, T16N, R1E	Ohop Creek	Lake Level (523 ft)	3/25/66
Thompson Creek and all tributaries SE1/4NE1/4 Sec. 11, T17N, R1E	Nisqually River	Low Flow (1.0 cfs bypass)	11/19/51
Unnamed Stream and all tributaries SW1/4NW1/4 Sec. 11, T15N, R4E	Alder Lake (Nisqually River)	Closure	4/28/64
Unnamed Stream and all tributaries SW1/4SE1/4 Sec. 17, T17N, R2E	Centralia Canal (Nisqually River)	Low Flow (0.75 cfs bypass)	11/19/51
Unnamed Stream and all tributaries SE1/4SE1/4 Sec. 27, T17N, R2E	Nisqually River	Low Flow (0.50 cfs bypass)	12/6/50
Yelm Creek and all tributaries SW1/4SW1/4 Sec. 12, T.17N, R1E	Nisqually River	Closure	8/7/51

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-040, filed 2/2/81.]

WAC 173-511-050 Ground water. Future ground water withdrawal proposals will not be affected by this chapter unless it is verified that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-050, filed 2/2/81.]

WAC 173-511-060 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-060, filed 2/2/81.]

WAC 173-511-070 Exemptions. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) If, upon detailed analysis, appropriate and environmentally sound proposed storage facilities are found to be compatible with this chapter, such facilities may be approved.

(3) Domestic use for a single residence shall be exempt from the provisions of this chapter; provided that, if the cumulative effects of numerous single domestic diversions and/or withdrawals would seriously affect the quantity of water available for instream uses, then only domestic in-house use shall be exempt if no alternative source is available.

(4) Stock-watering use, except that related to feedlots, shall be exempt from the provisions established in this chapter.

(5) Future rights for nonconsumptive uses may be granted.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-070, filed 2/2/81.]

WAC 173-511-080 Future rights. No rights to divert or store public surface waters of the Nisqually River basin, WRIA 11, shall hereafter be granted, except as provided in WAC 173-511-070, which shall conflict with the purpose of this chapter as stated in WAC 173-511-020.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-080, filed 2/2/81.]

WAC 173-511-090 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), § 173-511-090, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-090, filed 2/2/81.]

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 173-511-100 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 173-512 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—CHAMBERS-CLOVER CREEKS BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 12

WAC

WAC 173-512-010 Authority. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flow and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-010, filed 12/12/79.]

WAC 173-512-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Chambers-Clover creeks drainage basin with instream flows and levels necessary to provide for preservation and protection of wildlife, fish, scenic, aesthetic and other environmental values, recreational and navigational values, and to preserve water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-020, filed 12/12/79.]

WAC 173-512-030 Surface water closures. The department of ecology, having determined that further consumptive appropriations would harmfully impact instream values closes the following streams and lakes in Water Resource Inventory Area 12 to further consumptive appropriations:

SURFACE WATER CLOSURES

Stream or Lake	Tributary to
Chambers Creek	Puget Sound
and all tributaries, including among others:	
Leach Creek	Chambers Creek
Flett Creek	Chambers Creek
Steilacoom Lake	Chambers Creek
Ponce De Leon Creek	Steilacoom Lake
Clover Creek and all tributaries, including among others:	
North Fork Clover Creek	Clover Creek
Spanaway Creek	Clover Creek
Morey Creek	Clover Creek
Spanaway Lake	Spanaway Creek
Tule Lake	Spanaway Creek
Unnamed Stream (Crystal Springs Creek)	Puget Sound
including tributaries	Puget Sound
Sequalitchew Creek and all tributaries, including among others:	
Sequalitchew Lake	Sequalitchew Creek
American Lake	Sequalitchew Lake
Murray Creek (and tributaries)	American Lake

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-030, filed 12/12/79.]

WAC 173-512-040 Ground water. In future permitting actions relating to ground water withdrawals, the natural interrelationship of surface and ground waters shall be fully considered in water allocation decisions to assure compliance with the intent of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-040, filed 12/12/79.]

WAC 173-512-050 Future rights. No water rights for consumptive uses of waters from the streams and lakes listed in WAC 173-512-030 shall hereafter be granted. Future rights for nonconsumptive uses may be granted subject to the provisions of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-050, filed 12/12/79.]

WAC 173-512-060 Exemptions. (1) Nothing in this chapter shall affect any existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter; nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) Stock watering use, except that related to feed lots, shall be exempt from the surface water closures established in this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-060, filed 12/12/79.]

WAC 173-512-070 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 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), § 173-512-070, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-070, filed 12/12/79.]

WAC 173-512-075 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), § 173-512-075, 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 condi-

tions, 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.]

Chapter 173-513 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—DESCHUTES RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 13

WAC

WAC 173-513-010 General provision. These rules apply to waters within the Deschutes River basin, WRIA 13, as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-010, filed 6/24/80.]

WAC 173-513-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Deschutes River basin with instream flows and levels necessary to provide protection for wildlife, fish, scenic, aesthetic, environmental values, recreation, navigation, and water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-020, filed 6/24/80.]

WAC 173-513-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Control Station No. Stream Management Unit Name	Control Station Location, River Mile and Section, Township and Range	Affected Stream Reach
12.0800-00 Deschutes River	3.4 Sec. 35-18N-2W	From the confluence of the Deschutes River with Capitol Lake upstream to the Deschutes Falls at river mile 41.

(2) Instream flows established for the stream management unit described in WAC 173-513-030(1) are as follows:

INSTREAM FLOWS IN THE DESCHUTES RIVER BASIN
(in Cubic Feet per Second)

Month	Day	USGS Gage 212-0800-00 Deschutes River
Jan.	1	400
	15	400
Feb.	1	400
	15	400
Mar.	1	400
	15	400
Apr.	1	350
	15	(Closed)
May	1	(Closed)
	15	(Closed)
June	1	(Closed)
	15	(Closed)
July	1	(Closed)
	15	(Closed)
Aug.	1	(Closed)
	15	(Closed)
Sept.	1	(Closed)
	15	(Closed)
Oct.	1	(Closed)
	15	(Closed)
Nov.	1	150
	15	200
Dec.	1	300
	15	400

(3) Instream flow hydrograph, as represented in the document entitled "Deschutes River basin instream resource protection program," shall be used for identification of instream flows on those days not specifically identified in WAC 173-513-030(2).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-030, filed 6/24/80.]

WAC 173-513-040 Surface water source limitations to further consumptive appropriations. (1) The department of ecology, having determined that further consumptive appropriations would harmfully impact instream values, closes the following streams and lakes to further consumptive appropriation for the periods indicated.

New Surface Water Closures

Stream or Lake Section, Township and Range of Mouth or Outlet	Tributary to	Period of Closure
Deschutes River below Deschutes Falls (river mile 41)NW1/4SW1/4 Sec. 26, T. 18N.,R. 2W.	Puget Sound (Budd Inlet)	Apr. 15 to Nov. 1
Deschutes River above Deschutes Falls (river mile 41) and all tributaries of Deschutes River E1/2NE1/4 Sec. 10, T. 15N., R. 3E. (Deschutes Falls)		All year
McLane Creek and all tributaries SW1/4NW1/4 Sec. 33, T. 18N., R. 2W.	Puget Sound (Eld Inlet)	All year
Woodland Creek and all tributaries SW1/4NW1/4 Sec. 19, T. 19N., R. 1W.	Puget Sound (Henderson Inlet)	All year
Long Lake SE1/4NE1/4 Sec. 22, T. 18N., R. 1W.	Woodland Creek	All year

Stream or Lake Section, Township and Range of Mouth or Outlet	Tributary to	Period of Closure
Patterson Lake SE1/4SW1/4 Sec. 35, T. 18N., R. 1W.	Woodland Creek	All year
Hicks Lake NE1/4SW1/4 Sec. 27, T. 18N., R. 1W.	Woodland Creek	All year

(2) The following stream and lake low flows and closures are adopted confirming surface water source limitations previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050.

Existing Low Flow Limitations and Closures

Stream Section, Township and Range of Mouth	Tributary to	Action
Percival Creek SW1/4NE1/4 Sec. 22, T. 18N., R. 2W.	Capital Lake	Closure
Unnamed Stream NW1/4NW1/4 Sec. 33, T. 19N., R. 2W.	Puget Sound (Eld Inlet)	Low Flow (1.5 cfs)
Unnamed Stream NW1/4NW1/4 Sec. 25, T. 19N., R. 2W.	Gull Harbor	Low Flow (1.0 cfs)
Woodward Creek SW1/4NW1/4 Sec. 19, T. 19N., R. 1W.	Woodward Bay	Closure

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-040, filed 6/24/80.]

WAC 173-513-050 Ground water. Future ground water withdrawal proposals will not be affected by this chapter unless it is verified that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-050, filed 6/24/80.]

WAC 173-513-060 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-060, filed 6/24/80.]

WAC 173-513-070 Exemptions. (1) Nothing in this chapter shall affect water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Domestic use for a single residence and stock watering, except that use related to feedlots, shall be exempt from the provisions of this chapter if no alternative source is available. If the cumulative effects of numerous single domestic diversions would seriously affect the quantity of water available for instream uses, then only domestic in-house use shall be exempt.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-070, filed 6/24/80.]

WAC 173-513-080 Future rights. No rights to divert or store public surface waters of the Deschutes River basin, WRIA 13, shall hereafter be granted which shall conflict with the purpose of this chapter as stated in WAC 173-513-020.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-080, filed 6/24/80.]

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. 80-08-019 (Order DE 80-11), § 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), § 173-513-095, filed 6/9/88.]

WAC 173-513-100 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), § 173-513-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-100, filed 6/24/80.]

Chapter 173-514 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—KENNEDY-GOLDSBOROUGH WATER RESOURCE INVENTORY AREA (WRIA) 14

WAC

WAC 173-514-010 General provision. These rules apply to waters within the Kennedy-Goldsborough water resource inventory area (WRIA 14), as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), chapter 75.20 RCW (State Fisheries Code) and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-010, filed 1/23/84.]

WAC 173-514-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Kennedy-Goldsborough water resource inventory area with instream flows and levels necessary to provide protection for wildlife, fish, scenic, aesthetic, and environmental values, recreation, navigation, and water quality.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-020, filed 1/23/84.]

WAC 173-514-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Control Station No. Stream Management Unit Name	Control Station By River Mile and Sec. Township, & Range	Stream Management Reach
12-0740-00 Shumocher Creek	.02 Sec.7, T.21N., R.2WWM	From Mason Lake to headwaters including all tributaries.
WDOE-0745-50 Sherwood Creek	0.14 Sec.20, T.22N., R.1WWM	From influence of mean annual high tide at low instream flow levels to Mason Lake, including Mason Lake and all tributaries.
12-0750-00 Deer Creek	0.8 Sec.20, T.21N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
12-0755-00 Cranberry Creek	0.5 Sec.36, T.21N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including Cranberry Lake, Lake Limerick and all tributaries.
12-0760-00 Johns Creek	2.5 Sec.3, T.20N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
WDOE-0770-50 Goldsborough Creek	0.23 Sec.20, T.20N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
WDOE-0775-50 Mill Creek	3.1 Sec.25, T.20N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including Lake Isabella and all tributaries.
12-0780-00 Skookum Creek	3.0 Sec.19, T.19N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
WDOE-0785-50 Kennedy Creek	0.06 Sec.32, T.19N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including Summit Lake and all tributaries.
WDOE-0787-00 Perry Creek	1.06 Sec.13, T.18N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.

(2) Instream flows are established for the stream management units in WAC 173-514-030(1) as follows:

Instream Flows in the Kennedy-Goldsborough WRIA
(Instantaneous cubic feet per second)

Month	Day	12-0740-00 Shumocher Creek	WDOE 0745-50 Sherwood Creek	12-0750-00 Deer Creek
Jan	1	20	60	55
	15	20	60	55
Feb	1	20	60	55
	15	20	60	55
Mar	1	20	60	55
	15	20	60	55
Apr	1	20	60	55
	15	20	60	46
May	1	17	48	39
	15	14	37	33
Jun	1	12	29	28
	15	10	23	23.5
Jul	1	8.6	17.5	20
	15	7.2	14	20
Aug	1	6	11	20
	15	6	11	20
Sep	1	6	11	20
	15	6	11	20
Oct	1	6	11*	20*
	15	6	19*	20*
Nov	1	11	34*	33*
	15	20	60*	55*
Dec	1	20	60	55
	15	20	60	55

* Denotes closure period to all consumptive uses

Instream Flows in the Kennedy-Goldsborough WRIA
(Cont'd)
(Instantaneous cubic feet per second)

Month	Day	12-0755-00 Cranberry Creek	12-0760-00 Johns Creek	WDOE-0770-50 Goldsborough Creek
Jan	1	50	45	50
	15	50	45	50
Feb	1	50	45	50
	15	50	45	85
Mar	1	50	45	85
	15	50	45	85
Apr	1	50	45	85
	15	40	45	85
May	1	31	34	85 *
	15	23.5	26	85 *
Jun	1	18	20	85 *
	15	14	15.5	69 *
Jul	1	10.5	12	55 *
	15	8	9	52 *
Aug	1	8	7	48 *
	15	8	7	45 *
Sept	1	8	7	45 *
	15	8	7	45 *
Oct	1	8 *	7 *	45 *
	15	15 *	7 *	50 *
Nov	1	28 *	18 *	50
	15	50 *	45 *	50
Dec	1	50	45	50
	15	50	45	50

* Denotes closure period to all consumptive uses

Instream Flows in the Kennedy-Goldsborough WRIA
(Cont'd)
(Instantaneous cubic feet per second)

Month	Day	WDOE 0775-50 Mill Creek	12-0765-00 Skookum Creek	WDOE-0785-50 Kennedy Creek	WDOE-0787-00 Perry Creek
Jan	1	65	40	60	30
	15	65	40	60	30
Feb	1	65	40	60	30
	15	65	40	60	30
Mar	1	65	40	60	30
	15	65	40	60	30
Apr	1	65	40	60	21
	15	65	40	46	14
May	1	55	26*	35*	10*
	15	46	16.5 *	27*	6.8*
Jun	1	40	11*	20*	4.6*
	15	33	7*	16*	3.2*
Jul	1	28	4.6 *	12*	2.2*
	15	24	3*	9*	1.5*
Aug	1	20	3*	7*	1*
	15	20	3*	7*	1*
Sep	1	20	3*	7*	1*
	15	20	3*	7*	1*
Oct	1	20	3*	7*	1*
	15	20	5.6 *	14*	2.5*
Nov	1	35	15	29*	5.4
	15	65	40	60*	13
Dec	1	65	40	60	30
	15	65	40	60	30

* Denotes closure period to all consumptive uses

(3) Instream flow hydrographs, as represented in the document entitled "Kennedy-Goldsborough instream resources protection program, figs. 2-7, pgs. 26-28," shall be used for identification of instream flows on those days not specifically identified in WAC 173-514-030(2).

(4) Future consumptive water right permits issued hereafter for diversion of surface water in the Kennedy-Goldsborough WRIA and perennial tributaries shall be expressly subject to instream flows established in WAC 173-514-030 (1) through (3) as measured at the appropriate gage, preferably the nearest one downstream, except from those exempted uses described in WAC 173-514-060 (1) through (3).

(5) Projects that would reduce the flow in a portion of a stream's length (e.g.: Hydroelectric projects that bypass a portion of a stream) will be considered consumptive only with respect to the affected portion of the stream and will be subject to specific instream flow requirements as specified by the department for the bypassed reach notwithstanding WAC 173-514-030 (1) through (3) and 173-514-040 if detailed, project-specific instream flow studies for the bypassed reach, as may be required, demonstrate that a different flow requirement is appropriate. The department may require the project proponent to conduct such studies.

(6) If department investigations determine that withdrawal of ground water from the source aquifers would not interfere significantly with stream flow during the period of stream closure or with maintenance of minimum flows, then applications to appropriate public ground waters may be approved and permits or certificates issued.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-030, filed 1/23/84.]

WAC 173-514-040 Surface water source limitations to further consumptive appropriation. (1) The department, having determined further consumptive appropriation for all uses would harmfully impact instream values, closes the following streams including tributaries for the period indicated:

(a) Stream Name	Tributary to	Closure Period
Alderbrook Creek	Hood Canal	May 1 - October 31
Campbell Creek	Oakland Bay	May 1 - October 31
Elson Creek	Skookum Inlet	May 1 - October 31
Fawn Lake Outlet	Skookum Inlet	May 1 - October 31
Jones Creek	Pickering Passage	May 1 - October 31
Jarrell Creek	Jarrell Cove	May 1 - October 31
Little Creek	Skookum Creek	May 1 - October 31
Melaney Creek	Oakland Bay	May 1 - October 31
Shelton Creek	Oakland Bay	May 1 - October 31
Twahnoh Creek	Hood Canal	May 1 - October 31
Uncle John Creek	Oakland Bay	May 1 - October 31

The minimum flow during the closure period on the streams listed above is the natural flow. Because insufficient flow data is available to develop instream flows outside the closure period, minimum flows for any water right application for consumptive use will be considered on a case by case basis in consultation with the departments of fisheries and game (RCW 75.20.050).

(b) Stream Name	Closure Period
Kennedy Creek	May 1 - November 15
Cranberry Creek	September 16 - November 15
Deer Creek	September 16 - November 15
Johns Creek	September 16 - November 15
Sherwood Creek	September 16 - November 15
Perry Creek	May 1 - October 31

Because sufficient hydrologic data is available for the above streams, a minimum flow is established during the closed and nonclosed period in WAC 173-514-030(2).

(2) Except as noted in the footnotes, the following existing surface water source limitations, previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050 are hereby confirmed and adopted for the period indicated:

Stream*/Tributary to	Action	Period
Goldsborough Creek - Oakland Bay	Closure+	May 1 - October 31
Gosnell Creek - Isabella Lake	Low flow (10 cfs)	All year
Jarrell Creek - Jarrell Cove	Low flow@ (.30 cfs)	May 1 - October 31
Johns Creek - Oakland Bay	Low flow@ (4 cfs)	Sept. 16 - November 15
Kennedy Creek - Totten Inlet	Low flow@ (3 cfs)	May 1 - November 15
Schneider Creek - Totten Inlet	Closure#	May 1 - October 31
Skookum Creek - Skookum Inlet	Closure+	May 1 - October 31
Summit Lake - Kennedy Creek	Lake level	All year
Unnamed Stream - Mill Creek Sec.34, T.20N R.3 EWM	Low flow (2 cfs)	All year

*Closures and low flow limitations also apply to tributaries of these streams.
@Superseded by a new action in this section.
#The minimum flow during the closure period is the natural flow.
+Minimum flows are specified in WAC 173-514-030(2).

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-040, filed 1/23/84.]

WAC 173-514-050 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-050, filed 1/23/84.]

WAC 173-514-060 Exemptions. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Single domestic and stockwatering use, except that related to feedlots, shall be exempt from the provisions established in this chapter. If the cumulative impacts of numerous single domestic diversions would significantly affect the quantity of water available for instream uses, then only single domestic in-house use shall be exempt if no alternative source is available.

(3) Nonconsumptive uses which are compatible with the intent of the chapter may be approved.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-060, filed 1/23/84.]

WAC 173-514-070 Future rights. No rights to divert or store public surface waters of the Kennedy-Goldsborough WRIA 14, shall hereafter be granted which shall conflict with the purpose of this chapter.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-070, filed 1/23/84.]

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.]

WAC 173-514-085 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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-514-085, filed 6/9/88.]

WAC 173-514-090 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), § 173-514-090, 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 173-515 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—KITSAP WATER RESOURCE INVENTORY AREA (WRIA) 15

WAC

WAC 173-515-010 General provision. These rules apply to waters within the Kitsap water resource inventory area (WRIA) 15 as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-010, filed 7/24/81.]

WAC 173-515-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Kitsap water resource inventory area (WRIA) 15 with instream flows and levels necessary to provide for preservation and protection of wildlife, fish, scenic, aesthetic and other environmental values, recreational and navigational values, and to preserve water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-020, filed 7/24/81.]

WAC 173-515-030 Establishment of instream flows. (1) The following instream flows are established for each stream listed, from the point of influence of mean high tide at low flow to the stream's headwaters including tributaries except where indicated otherwise. Monitoring will take place at the control locations indicated.

INSTREAM FLOWS IN THE KITSAP WATER RESOURCE INVENTORY AREA (WRIA) 15

*WAC 173-515-040(2) closes certain streams to additional consumptive appropriations during specific time periods. These closures are indicated by asterisks in the following table. Such closures supersede the indicated instream flow. The Union River closure extends upstream to McKenna Falls (RM 6.7).

**Stream numbers correlate with Plate I, instream resources protection program, Kitsap water resource inventory area (WRIA) 15.

Stream Number**		#7	#44	#60
Stream Name		Union River	Tahuya River	Rendsland Cr.
Gage Number		12-0635.00	12-0680.00	
River Mile		2	2.5	near mouth
Sec., Twp., Rge.		20,23N.,1W.	12,22N.,3W.	19,22N.,3W.
Month	Day	cfs	cfs	cfs
Jan.	1	65*	90	18
	15	65*	90	18
Feb.	1	65*	90	18
	15	65*	90	18
Mar.	1	59*	90	18
	15	53*	90	18
Apr.	1	48*	72	18
	15	44*	58	16
May	1	40*	47	13.5
	15	36*	38	12
June	1	33*	31	10*
	15	29*	25*	9*
July	1	27*	18*	8*
	15	24*	12*	7*
Aug.	1	22*	8.5*	6*
	15	20*	5.5*	5*
Sept.	1	20*	5.5*	5*
	15	20*	5.5*	5*
Oct.	1	20*	7*	5*
	15	20*	13*	7*
Nov.	1	27*	25	9.5
	15	35*	48	13
Dec.	1	47*	90	18
	15	65*	90	18

Stream Number**		#70	#96	#113
Stream Name		Dewatto River	Anderson Cr.	Stavis Cr.
Gage Number		12-0685.00		12-0695.00
River Mile		1.5	0.1	0.75
Sec., Twp., Rge.		23,23N.,3W.	17,24N.,2W.	25,25N.,2W.
Month	Day	cfs	cfs	cfs
Jan.	1	75	10.5	15
	15	75	10.5	15
Feb.	1	75	10.5	15
	15	75	10.5	15
Mar.	1	75	10.5	15
	15	75	10.5	15
Apr.	1	60	10.5	14
	15	49	10	13
May	1	39	9	12
	15	32	8.5	11
June	1	25	8	10
	15	22*	7.5	9.5
July	1	20*	7	9
	15	17.5*	6.5	8
Aug.	1	15.5*	6	7.5
	15	13.5*	6	7
Sept.	1	13.5*	6	7
	15	13.5*	6	7
Oct.	1	13.5*	6.5	7
	15	17*	7	8.5
Nov.	1	21	8	10.5
	15	39	8.5	12.5
Dec.	1	75	9.5	15
	15	75	10.5	15

Stream Number**		#121	#124	#192
Stream Name		Big Beef Cr.	Anderson Cr.	Grover's Cr.
Gage Number		12-0695.50		
River Mile		0.25	near mouth	near mouth
Sec., Twp., Rge.		22,25N.,1W.	13,25N.,1W.	4,26N.,2E.
Month	Day	cfs	cfs	cfs
Jan.	1	40	8	5.5
	15	40	8	5.5
Feb.	1	40	8	5.5
	15	40	8	5.5

Stream Number**		#121	#124	#192
Stream Name		Big Beef Cr.	Anderson Cr.	Grover's Cr.
Gage Number		12-0695.50		
River Mile		0.25	near mouth	near mouth
Sec., Twp., Rge.		22,25N.,1W.	13,25N.,1W.	4,26N.,2E.
Month	Day	cfs	cfs	cfs
Mar.	1	40	8	5.5
	15	40	8	5.5
Apr.	1	31	8	5.5
	15	24	6	4.5
May	1	18	4.5	4
	15	14*	3.5	3.5
June	1	11*	3*	3*
	15	8.5*	2*	2.5*
July	1	6.5*	1.5*	2.5*
	15	5*	1.5*	2*
Aug.	1	4*	1*	2*
	15	4*	1*	2*
Sept.	1	4*	1*	2*
	15	4.5*	1*	2.5*
Oct.	1	5.5*	1.5*	3*
	15	6*	1.5*	3.5*
Nov.	1	7*	2.5*	4
	15	12	4.5	4.5
Dec.	1	22	8	5.5
	15	40	8	5.5

Stream Number**		#223	#248	#259
Stream Name		Steel Creek	Strawberry/ Kochs/Cooks	Dickerson Cr.
Gage Number				
River Mile		near mouth	near mouth	Confluence with Chico Cr.
Sec., Twp., Rge.		14,25N.,1E.	20,25N.,1E.	8,24N.,1E.
Month	Day	cfs	cfs	cfs
Jan.	1	6	7	3*
	15	6	7	3*
Feb.	1	6	7	3*
	15	6	7	3*
Mar.	1	6	7	3*
	15	6	7	3*
Apr.	1	6	7	2.5*
	15	5	5.5	2.5*
May	1	4.5	4.5	2*
	15	4	3.5	2*
June	1	3.5*	2.5*	1.5*
	15	3*	2*	1.5*
July	1	3*	1.5*	1.5*
	15	2.5*	1.5*	1.5*
Aug.	1	2.5*	1*	1*
	15	2.5*	1*	1*
Sept.	1	2.5*	1*	1*
	15	3*	1*	1*
Oct.	1	3.5*	1*	1*
	15	4*	1.5*	1.5*
Nov.	1	4.5	2.5	1.5*
	15	5	4	1.5*
Dec.	1	6	7	3*
	15	6	7	3*

Stream Number**		#259	#268	#294
Stream Name		Chico Cr.	Gorst Cr.	Curley Cr.
Gage Number				
River Mile		near mouth	0.1	0.1
Sec., Twp., Rge.		5,24N.,1E.	32,24N.,1E.	4,23N.,2E.
Month	Day	cfs	cfs	cfs
Jan.	1	15*	25	40
	15	15*	25	40
Feb.	1	15*	25	40
	15	15*	25	40
Mar.	1	15*	25	40
	15	15*	21	40

Stream Number**		#259	#268	#294
Stream Name		Chico Cr.	Gorst Cr.	Curley Cr.
Gage Number				
River Mile		near mouth	0.1	0.1
Sec., Twp., Rge.		5,24N.,1E.	32,24N.,1E.	4,23N.,2E.
Month	Day	cfs	cfs	cfs
Apr.	1	15*	18	31
	15	13.5*	15	25
May	1	12*	13	20
	15	11*	11	16
June	1	10*	10.5	12.5
	15	9*	10	10*
July	1	8.5*	9	8*
	15	8*	8.5	6.5*
Aug.	1	7.5*	8	5*
	15	7*	7.5	5*
Sept.	1	7*	7.5	5*
	15	7*	7.5	5*
Oct.	1	7*	8	5*
	15	8*	8.5	8*
Nov.	1	9*	9	14
	15	11.5*	15	23
Dec.	1	15*	25	40
	15	15*	25	40

Stream Number**		#313	#321	#354
Stream Name		Ollala Cr.	Crescent Cr.	Purdy Cr.
Gage Number				12-0728.00
River Mile		near mouth	near mouth	0.1
Sec., Twp., Rge.		4,22N.,2E	32,22N.,2E.	24,22N.,1E.
Month	Day	cfs	cfs	cfs
Jan.	1	13	9	7
	15	13	9	7
Feb.	1	13	9	7
	15	13	9	7
Mar.	1	13	9	7
	15	13	9	6
Apr.	1	13	9	5.5
	15	11	7.5	5
May	1	9.5	7	4.5
	15	8.5	6	4
June	1	7.5*	5*	3.5*
	15	6.5*	4.5*	3*
July	1	5.5*	4*	3*
	15	5*	3.5*	2.5*
Aug.	1	5*	3.5*	2.5*
	15	5*	3.5*	2.5*
Sept.	1	5*	3.5*	2.5*
	15	6*	4*	3*
Oct.	1	7*	5*	3*
	15	8*	5.5*	3.5*
Nov.	1	9	6.5	4.5
	15	11	7.5	5.5
Dec.	1	13	9	7
	15	13	9	7

Stream Number**		#369	#415	#425
Stream Name		Lackey Cr.	Rocky Cr.	Coulter Cr.a/
Gage Number				
River Mile		near mouth	0.1	0.1
Sec., Twp., Rge.		31,21N.,1E.	27,22N.,1W	9,22N.,1W.
Month	Day	cfs	cfs	cfs
Jan.	1	5	18	18
	15	5	18	18
Feb.	1	5	18	18
	15	5	18	18
Mar.	1	5	18	18
	15	4.5	18	18
Apr.	1	4	14.5	18
	15	3.5	11.5	17
May	1	3	9	16.5
	15	2.5	7.5	15.5
June	1	2.5*	6*	15
	15	2*	5.5*	14.5
July	1	2*	5*	13.5
	15	2*	4.5*	13
Aug.	1	1.5*	4.5*	13
	15	1.5*	4*	13
Sept.	1	1.5*	4*	13
	15	1.5*	4*	13
Oct.	1	2*	4*	13
	15	2*	5*	14
Nov.	1	2*	6	15
	15	2.5*	7	16.5
Dec.	1	3	18	18
	15	4	18	18

a/ Relating to the waters of Coulter Creek, the department is cognizant of a settlement agreement resulting from Cause No. 14262, in the superior court of the state of Washington for Mason County, *"Peter E. Overton, et al., v. Washington Department of Fisheries, et al."*

Although the department of ecology was not a party in this litigation, the department will, to the extent possible, give full consideration to the intent of the settlement agreement in any future water right actions involving said parties: Provided, That, said actions must be consistent with the requirements of chapters 90.03 and 90.44 RCW, and satisfy the general intent of chapter 173-515 WAC.

(2) Instream flow hydrographs, as represented in the document entitled "instream resources protection program," shall be used for definition of instream flows on those days not specifically identified in WAC 173-515-030(1).

(3) All consumptive water rights hereafter established shall be expressly subject to instream flows and closures established in WAC 173-515-030(1) and 173-515-040 (1) through (3). Closures override the instream flows where both are shown except as provided in WAC 173-515-070.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-030, filed 7/24/81.]

WAC 173-515-040 Surface water closures. (1) The department, having determined there are no waters available for further appropriation, closes the following streams to further consumptive appropriation. These closures confirm surface water source limitations previously established administratively under authority of chapter 90.03 RCW and RCW 75.20.050.

Surface Water Closures

**Stream numbers correlate with Plate I, instream resources protection program, Kitsap water resource inventory area (WRIA) 15.

Stream Number** Stream or Lake Name Sec., Twp., Rge. at Mouth	Tributary to	Date of Original Closure
Stansberry Lake and tributaries Sec. 19, T.22N., R.1E.	Carr Inlet	5-17-66
Mission Lake and tributaries Outlet: NE1/4NW1/4 Sec. 32, T.24N.,R.1W.	Mission Creek	7-19-78

Stream Number** Stream or Lake Name Sec., Twp., Rge. at Mouth	Tributary to	Date of Original Closure
#12 Mission Creek and tributaries NW1/4NE1/4 Sec. 1, T.22N., R.2W.	Hood Canal	12-5-51
#57 Unnamed Stream and tributaries Sec. 20, T.21N., R.4W.	Hood Canal	11-3-48
#117 Seabeck Creek and tributaries SE1/4SW1/4 Sec. 20, T.25N., R.1W.	Seabeck Bay	8-27-54
#158 Unnamed Stream (Gamble Creek, Christianson Creek) and tributaries SW1/4SW1/4 Sec. 20, T.27N., R.2E.	Port Gamble	8-15-75
#207 Unnamed Stream (Dogfish Creek, Harding Creek) and tributaries NE1/4NE1/4 Sec. 15, T.26N., R.1E.	Liberty Bay	8-21-75
#245 Barker Creek and tributaries SW1/4SW1/4 Sec. 22, T.25N., R.1E.	Dyes Inlet	2-21-61
#246 Clear Creek and tributaries SE1/4SW1/4 Sec. 16, T.25N., R.1E.	Dyes Inlet	7-27-53
#259 Chico Creek and tributaries above confluence of Dickerson Creek, (excluding Wildcat Lake). Sec. 5, T.24N., R.1E.	Chico Bay	11-3-52
#259 Kitsap Creek and tributaries Sec. 5, T.24N., R.1E.	Chico Creek	7-2-42
#259 Unnamed Stream and tributaries SE1/4SW1/4 Sec. 17, T.24N., R.1E.	Kitsap Lake	12-8-52
#279 Blackjack Creek and tributaries NE1/4SE1/4 Sec. 25, T.24N., R.1E.	Sinclair Inlet	4-5-60
#285 Unnamed Stream (Sullivan Creek) and tributaries NE1/4SW1/4 Sec.19, T.24N., R.2E	Sinclair Inlet	5-9-75
#294 Salmonberry Creek and tributaries NW1/4SE1/4 Sec. 18, T.23N., R.2E.	Long Lake	1-7-48
#356 Burley Creek and tributaries, SW1/4NW1/4 Sec. 12, T.22N., R.1E.	Burley Lagoon	5-10-51
#367 Minter Creek and tributaries SW1/4NE1/4 Sec. 29, T.22N., R.1E.	Henderson Bay	12-28-73
#402 Unnamed Stream (Dutcher Creek) and tributaries NE1/4NE1/4 Sec. 15, T.21N., R.1W.	Dutcher Cove	3-10-54
#510 Judd Creek and tributaries NE1/4NE1/4 Sec. 18, T.22N., R.3E.	Quartermaster Harbor	5-10-51

(2) The department has determined that (a) certain streams exhibit low summer flows and have a potential for drying up or inhibiting anadromous fish passage during critical life stages, and (b) historic flow regimes and current uses of certain other streams indicate that no water is available for additional appropriation. Based upon these determinations and in accordance with the general intent of RCW 75.20.050, the following streams are closed to further appropriation for the periods indicated:

New Surface Water Closures

**Stream numbers correlate with Plate I, instream resources protection program, Kitsap water resource inventory area (WRIA) 15.

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to	Period of Closure
#7 Union River and tributaries from the mouth to McKenna Falls (R.M. 6.7) SE1/4SW1/4 Sec. 29, T.23N., R.1W.	Hood Canal	All year
#44 Tahuya River and tributaries SE1/4SE1/4 Sec. 22, T.22N., R.3W.	Hood Canal	June 15-Oct. 15
#60 Rendsland Creek and tributaries NW1/4NW1/4 Sec. 19, T.22N., R.3W.	Hood Canal	June 1-Oct. 31
#70 Dewatto River and tributaries NW1/4SE1/4 Sec. 27, T.22N., R.3W.	Hood Canal	June 15-Oct. 31
#121 Big Beef Creek and tributaries SW1/4SE1/4 Sec. 15, T.25N., R.1W.	Hood Canal	May 15-Oct. 31
#124 Anderson Creek and tributaries NW1/4NW1/4 Sec. 13, T.26N., R.1W.	Hood Canal	June 1-Oct. 31
#192 Grover's Creek and tributaries NW1/4SW1/4 Sec. 4, T.26N., R.2E.	Puget Sound	June 1-Oct. 15
#223 Unnamed Stream (Steel Creek) and tributaries SE1/4SE1/4 Sec. 14, T.25N., R.1E.	Port Orchard	June 1-Oct. 15
#248 Unnamed Stream and tributaries (Strawberry/Cook's/Koch's Creek) SE1/4NE1/4 Sec. 20, T.25N., R.1E.	Dyes Inlet	June 1-Oct. 31
#259 Dickerson Creek and tributaries SW1/4NW1/4 Sec. 7, T.24N., R.1E.	Chico Creek	All year
#259 Chico Creek and tributaries below confluence of Dickerson Creek SW1/4SW1/4 Sec. 5, T.25N., R.1E.	Chico Bay	All year

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to	Period of Closure
#294 Curley Creek and tributaries NE1/4NE1/4 Sec. 18, T.23N., R.2E.	Yukon Harbor	June 15-Oct. 15
#313 Olalla Creek and tributaries SE1/4NE1/4 Sec. 4, T.22N., R.2E.	Colvos Passage	June 1-Oct. 15
#321 Crescent Creek and tributaries SE1/4SW1/4 Sec. 32, T. 22N., R.2E.	Gig Harbor	June 1-Oct. 15
#354 Purdy Creek and tributaries NE1/4NW1/4 Sec. 12, T.22N., R.1E.	Henderson Bay	June 1-Oct. 31
#369 Lackey Creek and tributaries SE1/4SW1/4 Sec. 31, T.21N., R.1E.	Carr Inlet	June 1-Nov. 15
#415 Rocky Creek and tributaries SE1/4SE1/4 Sec. 27, T.22N., R.1E.	Case Inlet	June 1-Oct. 31

(3) In the Kitsap basin numerous small streams with estimated mean annual flow of 5 cfs or less have been identified as having high instream values for anadromous fish, aesthetics, water quality, and/or recreation. In accordance with the general intent of RCW 75.20.050 the department has determined that the total natural flow of these streams is required for protection and preservation of instream resources, and that no water is available for additional consumptive appropriation. The natural flow, in effect, constitutes the minimum flow for protection of the instream resources. The following streams possess such characteristics and are therefore closed year-round to further consumptive appropriation.

New Surface Water Closures

**Stream numbers correlate with Plate I, instream resources protection program, Kitsap water resource inventory area (WRIA) 15.

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to
#13 Little Mission Creek and tributaries SE1/4NW1/4 Sec. 1, T.22N., R.2W.	Hood Canal
#18 Stimson Creek and tributaries NW1/4NW1/4 Sec. 11, T.22N., R.2W.	Hood Canal
#31 Unnamed Stream (Little Shoefly Creek) and tributaries SW1/4NW1/4 Sec. 17, T.22N., R.2W.	Hood Canal
#34 Shoefly Creek and tributaries SE1/4SW1/4 Sec. 18, T.22N., R.2W.	Hood Canal
#46 Caldervin Creek and tributaries NE1/4NE1/4 Sec. 28, T.21N., R.3W.	Hood Canal
#50 Hall Creek and tributaries Sec. 20, T.21N., R.3W.	Hood Canal
#52 Hoddy Creek and tributaries Sec. 20, T.21N., R.3W.	Hood Canal
#54 Fay Creek and tributaries Sec. 21, T.20N., R.3W.	Hood Canal
#55 Brown Creek and tributaries Sec. 21, T.20N., R.3W.	Hood Canal
#56 Unnamed Stream (West Creek) and tributaries Sec. 20, T.22N., R.3W.	Hood Canal
#101 Harding Creek and tributaries NW1/4SW1/4 Sec. 9, T.24N., R.2W.	Hood Canal
#164 Unnamed Stream (Little Boston Creek) and tributaries SW1/4SW1/4 Sec. 5, T.27N., R.2E.	Port Gamble
#181 Unnamed Stream and tributaries SE1/4SW1/4 Sec. 26, T.27N., R.2E.	Apple Tree Cove
#184 Unnamed Stream and tributaries NE1/4SW1/4 Sec. 36, T.27N., R.2E.	Apple Tree Cove
#190 Unnamed Stream and tributaries Sec. 9, T.26N., R.2E.	Puget Sound
#196 Cowling Creek and tributaries NW1/4NW1/4 Sec. 16, T.26N., R.2E.	Miller Bay
#198 Thompson Creek and tributaries SW1/4SE1/4 Sec. 29, T.26N., R.2E.	Port Orchard
#208 Johnson Creek and tributaries SE1/4NW1/4 Sec. 22, T.26N., R.1E.	Liberty Bay
#213 Scandia Creek and tributaries SW1/4NE1/4 Sec. 27, T.26N., R.1E.	Liberty Bay
#241 Mosher Creek and tributaries SW1/4NE1/4 Sec. 34, T.25N., R.1E.	Dyes Inlet
#272 Anderson Creek and tributaries SE1/4NE1/4 Sec. 33, T.24N., R.1E.	Sinclair Inlet
#275 Ross Creek and tributaries SE1/4SE1/4 Sec. 27, T.24N., R.1E.	Sinclair Inlet

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to
#289 Beaver Creek and tributaries NW1/4SE1/4 Sec. 16, T.24N., R.2E.	Rich Passage
#322 North Creek and tributaries NE1/4SE1/4 Sec. 6, T.21N., R.2E.	Gig Harbor
#342 Unnamed Stream and tributaries NW1/4SE1/4 Sec. 10, T.21N., R.1E.	Henderson Bay
#343 Unnamed Stream (Meyer Creek) and tributaries SW1/4SW1/4 Sec. 2, T.21N., R.1E.	Hood Canal
#407 Unnamed Stream and tributaries SE1/4NW1/4 Sec. 2, T.21N., R.1W.	Vaughn Bay
#434 Unnamed stream and tributaries SE1/4SE1/4 Sec. 15, T.25N., R.2E.	Murden Cove
#461 Unnamed Stream and tributaries SE1/4NE1/4 Sec. 20, T.25N., R.2E.	Fletcher Bay
#514 Unnamed Stream (Fisher Creek) and tributaries SW1/4NW1/4 Sec. 19, T.22N., R.3E.	Quartermaster Harbor
#530 Jod Creek and tributaries NW1/4NW1/4 Sec. 14, T.22N., R.2E.	Colvos Passage
#540 Needle Creek and tributaries NE1/4SE1/4 Sec. 13, T.23N., R.3E.	Colvos Passage

(4) Closures listed in WAC 173-515-040 (2) and (3) will supersede low flow surface water source limitations previously imposed by administrative authority pursuant to chapter 75.20 RCW.

(5) Lakes perennially tributary to closed streams are closed to further consumptive appropriation.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-040, filed 7/24/81.]

WAC 173-515-050 Ground water. Future groundwater withdrawal proposals will not be affected by this chapter unless it is determined that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-050, filed 7/24/81.]

WAC 173-515-060 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-060, filed 7/24/81.]

WAC 173-515-070 Exemptions. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) If, upon detailed analysis, appropriate and environmentally sound proposed storage facilities are found to be compatible with this chapter, such facilities may be approved but will be subject to the establishment of appropriate protection flows for drought or low runoff periods.

(3) Domestic use for a single residence shall be exempt from the provisions of this chapter. If the cumulative effects of numerous single domestic diversions would seriously affect the quantity of water available for instream uses, then domestic in-house use shall be exempt if no alternative source is available.

(4) Stockwatering use, except that related to feedlots, shall be exempt from the provisions established in this chapter.

(5) Future rights for nonconsumptive uses may be granted.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-070, filed 7/24/81.]

WAC 173-515-080 Future rights. No right to divert or store public surface waters of the Kitsap water resource inventory area (WRIA) 15 shall hereafter be granted which shall conflict with the purpose of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-080, filed 7/24/81.]

WAC 173-515-090 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), § 173-515-090, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-090, filed 7/24/81.]

WAC 173-515-095 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), § 173-515-095, filed 6/9/88.]

WAC 173-515-100 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), § 173-515-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-100, filed 7/24/81.]

Chapter 173-522 WAC

WATER RESOURCES PROGRAM IN THE CHEHALIS RIVER BASIN, WRIA-22 AND 23

WAC

WAC 173-522-010 General provision. These rules, including any subsequent additions and amendments, apply to waters within and contributing to the Chehalis River basin, WRIA-22 and 23 (see WAC 173-500-040). Chapter 173-500 WAC, the general rules of the department of ecology for the implementation of the comprehensive water resources program, applies to this chapter 173-522 WAC.

[Order 75-31, § 173-522-010, filed 3/10/76.]

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:

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Affected Stream Reach Including Tributaries
12.0200.00 Chehalis River Conf. w/Elk Creek	101.8 14-13-5W	From confluence with Elk Creek to headwaters except Elk Cr.
12.0205.00 Elk Creek	2.5 18-13-5W	From confluence with Chehalis River to headwaters.
12.0216.30 So. Fork Chehalis R.	0.3 24-13-4W	From mouth to headwaters.
12.0235.00 Chehalis River	77.6 2-13-3W	From confluence with Newaukum River to confluence with Elk Cr., excluding Elk Creek, and Newaukum Rivers.
12.0240.00 S. Fork Newaukum R.	22.8 28-13-1E	From confluence with Lost Creek to headwaters, excluding Lost Creek.
12.0245.00 N. Fork Newaukum River	6.6 35-14-1W	From mouth to headwaters.
12.0250.00 Newaukum River	4.1 9-13-2W	From mouth to confluence with Lost Cr. on S. Fork Newaukum River, excluding N. Fork Newaukum River.
12.0253.00 Salzer Creek	3.8 22-14-2W	From mouth to headwaters.
12.0264.00 Skookumchuck River	6.4 12-15-2W	From mouth to headwaters.
12.0275.00 Chehalis River at Grand Mound	59.9 22-15-3W	From confluence with Newaukum River to confluence with Prairie Creek.
12.0292.00 Black River	4.1 33-16-4W	From mouth to headwaters.
12.0305.00 Cedar Creek	1.1 14-16-5W	From mouth to headwaters.
12.0309.00 Porter Creek	1.3 22-17-5W	From mouth to headwaters.
12.0310.00 Chehalis River at Porter	33.3 28-17-5W	From confluence with Prairie Creek near Grand Mound to confluence with Porter Creek including Prairie Creek.
12.0325.00 Cloquallum Creek	1.9 36-18-6W	From mouth to headwaters.
12.0342.00 East Fk. Satsop R.	15.9 15-19-6W	From confluence with Dry Run Cr. to headwaters excluding Dry Run Cr.
12.0343.00 Decker Creek	0.3 31-19-6W	From mouth to headwaters.
12.0345.00 Middle Fk. Satsop R.	0.4 36-19-7W	From mouth to headwaters.
12.0350.00 Satsop River	2.3 36-18-7W	From mouth to confl. with Dry Run Cr. on East Fk. Satsop R.
12.0350.02 Chehalis R. below confl. w/Satsop R.	20.0 7-17-6W	From confluence with Porter Ck. to just below confl. with Satsop River.
12.0374.00 Wynoochee River	5.9 27-18-8W	From mouth to headwaters.
12.0380.00 Wishkah River	16.2 22-19-9W	From influence of mean annual high tide at low base flow levels to headwaters. Excluding E. Fk. Wishkah River.
12.0382.90 E. Fk., Wishkah R.	0.9 36-19-9W	From mouth to headwaters.
12.0385.00 W. Fk. Hoquiam River	9.4 14-18-10W	From mouth to headwaters.
12.0385.80 Middle Fk. Hoquiam R.	1.6 4-18-10W	From mouth to headwaters.

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Affected Stream Reach Including Tributaries
12.0386.60 East Fork Hoquiam	7.1 8-18-9W	From mouth to headwaters.
12.0390.00 Humptulips River	24.8 17-20-10W	From influence of mean annual high tide at low base flow levels to headwaters.
12.0174.00 Elk River	3.0 3-16-11W	From influence of mean annual high tide at low base flow levels to headwaters.
12.0175.00 Johns River	6.0 21-16-10W	From influence of mean annual high tide at low base flow levels to headwaters.
12.0180.00 Newskah Creek	3.5 32-17-9W	From influence of mean annual high tide at low base flow levels to headwaters.
12.0185.00 Charley Creek	2.0 21-17-9W	From influence of mean annual high tide at low base flow levels to headwaters.

(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)

Month	Day	12.0200.00 Chehalis R. nr. Elk Cr.	12.0205.00 Elk Cr.	12.0216.30 So. Fk. Chehalis R.	12.0235.00 Chehalis R.
Jan.	1	260	100	200	700
	15	260	100	200	700
Feb.	1	260	100	200	700
	15	260	100	200	700
Mar.	1	260	100	200	700
	15	260	100	200	700
Apr.	1	260	100	200	700
	15	260	100	200	700
May	1	195	76	145	525
	15	146	57	105	400
June	1	108	43	75	300
	15	82	32	55	230
July	1	62	25	40	175
	15	46	19	29	130
Aug.	1	37	16	21	98
	15	31	14	15	75
Sep.	1	31	14	15	75
	15	31	14	15	75
Oct.	1	39	15	21	92
	15	49	17	28	115
Nov.	1	88	31	56	215
	15	150	56	105	390
Dec.	1	260	100	200	700
	15	260	100	200	700

Month	Day	12.0240.00 Newaukum R. S. Fork	12.0245.00 Newaukum R. N. Fork	12.0250.00 Newaukum R.	12.0253.00 Salzer Cr.
Jan.	1	125	62	250	11
	15	125	62	250	11
Feb.	1	125	62	250	11
	15	125	62	250	11
Mar.	1	125	62	250	11
	15	125	62	250	11
Apr.	1	125	62	250	11
	15	125	62	250	11
May	1	110	47	210	5.8
	15	88	36	160	2.8
June	1	70	27	118	1.4
	15	56	21	90	.73
July	1	45	16	68	.38
	15	36	12	52	.20
Aug.	1	29	9	38	.10
	15	27	7	35	.05
Sep.	1	27	7	35	.05
	15	27	7	35	.05
Oct.	1	33	8.4	43	.14
	15	40	10	54	.40
Nov.	1	58	19	91	1.35
	15	85	34	150	3.9
Dec.	1	125	62	250	11
	15	125	62	250	11

Month	Day	12.0240.00 Newaukum R. S. Fork	12.0245.00 Newaukum R. N. Fork	12.0250.00 Newaukum R.	12.0253.00 Salzer Cr.
Jan.	1	125	62	250	11
	15	125	62	250	11
Feb.	1	125	62	250	11
	15	125	62	250	11
Mar.	1	125	62	250	11
	15	125	62	250	11

Month	Day	12.0264.00 Skookumchuck River	12.0275.00 Chehalis R. at Grand M.	12.0292.00 Black R.	12.0305.00 Cedar Cr.
Jan.	1	160	1300	200	90
	15	160	1300	200	90
Feb.	1	160	1300	200	90
	15	160	1300	200	90
Mar.	1	160	1300	200	90
	15	160	1300	200	90
Apr.	1	160	1300	200	90
	15	160	1300	200	90
May	1	160	1000	170	70
	15	130	780	145	54
June	1	103	600	120	40
	15	83	460	104	31
July	1	67	355	88	24
	15	54	275	75	19
Aug.	1	43	210	70	14
	15	35	165	66	11
Sep.	1	35	165	66	11
	15	35	165	66	11
Oct.	1	35	200	68	13.8
	15	35	250	70	17
Nov.	1	59	440	100	30
	15	96	760	140	52
Dec.	1	160	1300	200	90
	15	160	1300	200	90

Month	Day	12.0309.00 Porter Cr.	12.0310.00 Chehalis R. at Porter	12.0325.00 Cloquallum Creek	12.0342.00 Satsop R. E. Fork
Jan.	1	90	2500	150	280
	15	90	2500	150	280
Feb.	1	90	2500	150	280
	15	90	2500	150	280
Mar.	1	90	2500	150	280
	15	90	2500	150	280
Apr.	1	90	2500	150	280
	15	90	2500	150	280
May	1	56	1900	118	240
	15	35	1420	92	210
June	1	29	1060	70	175
	15	24	800	55	152
July	1	21	610	43	130
	15	17	460	34	112
Aug.	1	14.2	340	29	104
	15	12	260	24	95
Sep.	1	12	260	24	86
	15	12	260	24	80
Oct.	1	13.3	320	27	80
	15	15	400	30	80
Nov.	1	28	760	52	125
	15	50	1380	88	185

Month	Day	12.0309.00 Porter Cr.	12.0310.00 Chehalis R. at Porter	12.0325.00 Cloquallum Creek	12.0342.00 Satsop R. E. Fork
Dec.	1	90	2500	150	280
	15	90	2500	150	280

Month	Day	12.0343.00 Decker Cr.	12.0345.00 Satsop R. M. Fork	12.0350.00 Satsop R. nr.	12.0350.02 Chehalis R. Satsop
Jan.	1	130	260	1100	3800
	15	130	260	1100	3800
Feb.	1	130	260	1100	3800
	15	130	260	1100	3800
Mar.	1	130	260	1100	3800
	15	130	260	1100	3800
Apr.	1	130	260	1100	3800
	15	130	260	1100	3800
May	1	115	203	910	2910
	15	103	160	750	2300
June	1	91	125	600	1750
	15	81	98	500	1360
July	1	72	78	425	1085
	15	64	61	360	860
Aug.	1	56	48	300	680
	15	50	38	260	550
Sep.	1	50	38	260	550
	15	50	38	260	550
Oct.	1	54	41	280	640
	15	58	45	300	750
Nov.	1	77	83	475	1305
	15	100	145	720	2220
Dec.	1	130	260	1100	3800
	15	130	260	1100	3800

Month	Day	12-0374.00 Wynoochee River	12-0380.00 Wishkah R.	12-0382.90 Wishkah R. E. Fk.	12-0385.00 Hoquiam R. W. Fk.
Jan.	1	560	135	33	32
	15	560	135	33	32
Feb.	1	560	135	33	32
	15	560	135	33	32
Mar.	1	560	135	33	32
	15	560	135	33	32
Apr.	1	560	135	33	32
	15	560	135	33	32
May	1	560	135	33	32
	15	560	113	27	26
June	1	450	95	21	20
	15	360	80	17	16
July	1	290	68	14	12.8
	15	230	57	11.3	10
Aug.	1	185	47	9	8
	15	150	47	9	8
Sep.	1	150	47	9	8
	15	150	47	9	8
Oct.	1	150	53	10.4	9.4
	15	230	60	12	11
Nov.	1	360	91	20	19
	15	560	135	33	32
Dec.	1	560	135	33	32
	15	560	135	33	32

Month	Day	12-0385.80 Hoquiam R. M. Fk.	12-0386.60 Hoquiam R. E. Fk.	12-0390.00 Humptulips River	12-0174.00 Elk River
Jan.	1	27	44	600	50
	15	27	44	600	50
Feb.	1	27	44	600	50
	15	27	44	600	50
Mar.	1	27	44	600	50
	15	27	44	600	50
Apr.	1	27	44	600	50
	15	27	44	600	50
May	1	27	44	600	43
	15	21	38	500	37
June	1	16	33	400	31
	15	12.2	29	325	26
July	1	9.5	25	265	22
	15	7.4	22	215	19
Aug.	1	5.6	19	170	16
	15	5.6	19	170	16
Sep.	1	5.6	19	170	16
	15	5.6	19	170	16
Oct.	1	6.7	19	205	20
	15	8.0	25	250	25
Nov.	1	15	34	390	32
	15	27	44	600	40
Dec.	1	27	44	600	50
	15	27	44	600	50

Month	Day	12-0175.00 Johns River	12-0180.00 Newskah Creek	12-0185.00 Charley Creek
Jan.	1	70	17	14
	15	70	17	14
Feb.	1	70	17	14
	15	70	17	14
Mar.	1	70	17	14
	15	70	17	14
Apr.	1	70	17	14
	15	50	17	14
May	1	50	13.4	11
	15	42	10.7	8.6
June	1	35	8.3	6.7
	15	29	6.5	5.4
July	1	24	5.2	4.2
	15	21	4.1	3.3
Aug.	1	17	3.2	2.5
	15	17	2.5	2
Sep.	1	17	2.5	2
	15	17	2.5	2
Oct.	1	17	3.2	2.6
	15	24	4	3.5
Nov.	1	35	8.4	7.1
	15	49	17	14
Dec.	1	70	17	14
	15	70	17	14

(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), § 173-522-020, filed 6/9/88; Order 75-31, § 173-522-020, filed 3/10/76.]

WAC 173-522-030 Future allocation of surface water for beneficial uses. The department has determined that there are public waters available, subject to base flow, for allocation to beneficial uses from all streams within the Che-

halis basin; except for those streams and times declared closed in WAC 173-522-050. The department shall maintain a current tabulation of the amount of water that is available for appropriation at each stream management unit specified under WAC 173-522-020(1).

[Order 75-31, § 173-522-030, filed 3/10/76.]

WAC 173-522-040 Priority of future rights during times of water shortage. (1) Rights established in the future pertaining to waters available for allocation in WAC 173-522-030 shall be subject to a priority of use. Rights for domestic use, including irrigation of lawn and noncommercial garden not to exceed one-half acre, and livestock use excluding feedlot operation, shall be superior to all other consumptive and nonconsumptive uses.

(2) As between rights established in the future within a priority of use, the date of priority shall control with an earlier-dated right being superior to those rights with later dates.

(3) Additional water use priorities may be promulgated, when required, in the future.

[Order 75-31, § 173-522-040, filed 3/10/76.]

WAC 173-522-050 Streams closed to further consumptive appropriations. The department, having determined there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the following streams to further consumptive appropriation. An exception is made for domestic and normal stockwatering where there is no alternative source of water supply.

Surface Water Closures

STREAM	DATE OF CLOSURE	PERIOD OF CLOSURE
Beaver Creek, tributary to S. Fk., Newaukum River	12-5-52	1 May-31 Oct.
Beaver Creek, tributary to Black River	10-28-52	" "
Bunker Creek	1-17-50	" "
Dempsey Creek	11-15-74	" "
Dillenbaugh Creek	8-21-72	" "
Hanaford Creek	5-7-52	" "
Hope Creek & Garrard Creek	8-28-73	" "
Kearney Creek	10-27-52	" "
Lincoln Creek	11-5-48	" "
Middle Fork, Newaukum R.	4-7-50	" "
Mill Creek	3-21-52	" "
Mox Chehalis	4-25-57	" "
Salmon Creek	12-18-56	" "
Rock Creek	4-11-73	" "
Scatter Creek	7-20-50	" "
Stearns Creek	4-28-53	" "
Wildcat Creek	10-28-52	" "
Williams Creek	5-6-52	" "
Wynoochee River	3-9-62	" "
Black River	Date of Adoption	1 July-30 Sept.
Skookumchuck River	" "	" "
S. Fk. Chehalis river	" "	" "
Salzer Creek	" "	1 June-30 Sept.

Note: Affected reach is from mouth to headwaters and includes all tributaries in the contributing drainage area unless specifically excluded.

[Order 75-31, § 173-522-050, filed 3/10/76.]

WAC 173-522-060 Effect on prior rights. Nothing in this chapter shall be construed to lessen, enlarge, or modify the existing rights acquired by appropriation or otherwise.

[Order 75-31, § 173-522-060, filed 3/10/76.]

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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-522-080, filed 6/9/88.]

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.]

Chapter 173-531A WAC

WATER RESOURCE PROGRAM FOR THE JOHN DAY-MCNARY POOLS REACH OF THE COLUMBIA RIVER, WRIA 31 AND PARTS OF WRIA'S 32, 33, 36, AND 37

WAC

WAC 173-531A-010 Purpose. This chapter is adopted in accordance with the water resources management regulation, chapter 173-500 WAC, which was promulgated under the authority of the Water Resources Act of 1971, chapter 90.54 RCW. This chapter applies to the surface waters of the John Day and McNary Pools of the Columbia River and the Lower Snake River.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-010, filed 6/24/80. Formerly WAC 173-531-010.]

WAC 173-531A-020 Definitions. For the purposes of this chapter, the following definitions shall be used.

(1) "Department" means the Washington state department of ecology.

(2) "Reservation" means the designation of specific amounts of the water resources for specific future beneficial uses.

(3) "John Day/McNary Pools Reach," means that part of the Columbia River from John Day Dam upstream to the upper limits of McNary Pool including the upper limits of the pool in the Snake River, the Yakima River, and the Walla Walla River. This reach extends from river mile 216 to river mile 352 of the Columbia River, and includes the lower 10 miles of the Snake River, the lower 6 miles of the Yakima River, and the lower 9 miles of the Walla Walla River.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-020, filed 6/24/80. Formerly WAC 173-531-020.]

WAC 173-531A-030 Existing water rights protected. Nothing in the chapter shall be construed to lessen, enlarge, or modify existing rights acquired by appropriation or by other means, including federal reserved rights.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-030, filed 6/24/80. Formerly WAC 173-531-030.]

WAC 173-531A-040 Reservation for future irrigation use. (1) One million three hundred twenty thousand acre-feet per year are hereby reserved from the John Day/McNary Pools reach to provide a water supply for the 330,000 acres of irrigation projected to be developed by the year 2020. The 330,000 acres includes lands under existing water right permits, pending applications and land for which appropriation applications have not yet been filed.

(2) The priority dates of existing permits and applications already on file covered by the reservation are the dates of filing with the department. The priority dates of permits issued under applications filed in the future under the reservation shall be the effective date of this regulation (see RCW 90.03.345).

(3) Waters represented by canceled or relinquished applications and permits will still be considered reserved and may be subsequently filed on by interested appropriators.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-040, filed 6/24/80. Formerly WAC 173-531-040.]

WAC 173-531A-050 Reservation for municipal use. (1) Twenty-six thousand acre-feet of water per year is reserved from the John Day/McNary Pools reach to provide for future municipal supply to the year 2020.

(2) The reservation for municipal use does not guarantee any existing or future supply entity a specific quantity of water. Municipal water supply utilities must petition the department for reservation of water, for their particular needs, according to procedures of chapter 173-590 WAC.

(3) The priority dates of water right filings under the municipal reservation shall be the effective date of this regulation.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-050, filed 6/24/80. Formerly WAC 173-531-050.]

WAC 173-531A-060 Permit conditions. All permits issued for waters reserved under WAC 173-531A-040 or 173-531A-050 after the effective date of this chapter and prior to July 27, 1997, shall be subject to the provisions of chapter 173-563 WAC - instream resources protection program for the main stem Columbia River in Washington state. Any application for waters reserved under WAC 173-531A-040 or 173-531A-050 which is considered for approval or denial after July 27, 1997, will be evaluated for possible impacts on fish and existing water rights. The department will consult with appropriate local, state, and federal agencies and Indian tribes in making this evaluation. Any permit which is then approved for the use of such waters will be, if deemed necessary, subjected to instream flow protection or mitigation conditions determined on a case-by-case basis through the evaluation conducted with the agencies and tribes.

[Statutory Authority: Chapter 90.54 RCW, WAC 173-563-090 and ESHB 1110 (1997). 98-08-062 (Order 97-15), § 173-531A-060, filed 3/30/98, effective 4/30/98. Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-060, filed 6/24/80. Formerly WAC 173-531-060.]

WAC 173-531A-070 Department to review regulation. (1) The department, in accordance with applicable statutory provisions, shall review the reservations for future irrigation use and future municipal use at least every five years after adoption of this management regulation.

(2) In reviewing the reservations, the department will evaluate the account of water rights established under the reservations as provided in WAC 173-531A-040(3) and 173-531A-050(2). The department will also evaluate and update the accounts of ground water development and use on lands relating to the reserved waters and reduce the reserved amounts of surface water.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-070, filed 6/24/80.]

WAC 173-531A-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), § 173-531A-080, filed 6/9/88.]

WAC 173-531A-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), § 173-531A-090, filed 6/9/88.]

Chapter 173-532 WAC
WATER RESOURCES PROGRAM FOR THE WALLA WALLA RIVER BASIN, WRIA-32

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-532-085	Prioritizing change and transfer applications. [Statutory Authority: Chapters 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW. 99-13-093 (Order 9823), § 173-532-085, filed 6/14/99, effective 7/15/99.] Repealed by 01-21-056 (Order 01-06), filed 10/16/01, effective 11/16/01. Statutory Authority: RCW 43.21A.080.

WAC 173-532-010 Purpose. This regulation is adopted in accordance with the water resources management regulation, chapter 173-500 WAC, which was promulgated under the authority of the Water Resources Act of 1971, chapter 90.54 RCW. This chapter, including any amendments, applies to all waters that lie within or contribute to the Walla Walla River drainage basin. This chapter sets forth the department's policies to manage the basin's water resources.

[Order DE 77-30, § 173-532-010, filed 12/14/77.]

WAC 173-532-020 Definitions. For purposes of this chapter, the following definitions shall be used.

(1) "Allocation" means the designating of specific amounts of the water resource for specific beneficial uses.

(2) "Base flow" means a level of stream flow established in accordance with provisions of chapter 90.54 RCW required in perennial streams to preserve wildlife, fish, scenic, aesthetic, and other environmental and navigational values.

(3) "Consumptive use" means use of water whereby there is discernible diminishment of the water source.

(4) "Department" means the Washington state department of ecology.

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

(6) "Domestic use" means use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, irrigation of not over one-half acre of lawn and garden per dwelling, and other incidental household uses.

(7) "In-house domestic use" means use of water for drinking, cleaning, sanitation, and other uses in a residence, excluding irrigation of lawn and garden.

(8) "Municipal water supply system" means a set of facilities including source, treatment, storage, transmission and distribution facilities whereby water is furnished for commercial and/or industrial uses, and public water supplies with 10 or more connections.

(9) "Nonconsumptive use" means a type of water use where either there is no diversion from a source body, or where there is no discernible diminishment of the source.

(10) "Perennial stream" means a stream with a natural flow which is normally continuous at any given location.

(11) "Public water supply" means any water supply intended or used for human consumption and community uses.

(12) "Water right" means a right to make beneficial use of public waters of the state.

(13) "Zone of direct hydraulic continuity" means that zone of inter action between the surface water stream and the adjacent ground water whereby a pumping well can effectively reduce the flow in the stream to the detriment of surface water users, as determined by the department.

[Order DE 77-30, § 173-532-020, filed 12/14/77.]

WAC 173-532-030 Base flows. The establishment of base flows for surface streams will be deferred until such time as storage project or projects become a reality. At present, all surface streams are totally appropriated during the irrigation season and water is not available for protection of instream values. With the advent of future storage projects, the department may establish base flows which can be included as project benefits and maintained by storage releases.

[Order DE 77-30, § 173-532-030, filed 12/14/77.]

WAC 173-532-040 Streams closed to further consumptive appropriations. The department has determined that no waters are available for consumptive appropriation through the establishment of water rights for the following streams for the periods indicated:

TABLE II-1
SURFACE WATER CLOSURES*

STREAM NAME	AFFECTED REACH	EFFECTIVE DATE OF CLOSURE	PERIOD OF CLOSURE
Blue Creek	Mouth to Headwaters	Date of Adoption	June 1 - Oct. 31
Mill Creek	Mouth to State Line	2-6-1957	May 1 - Oct. 1
Walla Walla River	Mouth to State Line	Date of Adoption	May 1 - Nov. 30
Dry Creek	Mouth to Headwaters	Date of Adoption	April 15 - Nov. 15 or whenever Walla Walla at USGS Gage 14.0185 drops below 91.0 cfs.
Touchet River	Mouth to Headwaters	Date of Adoption	June 1 - Oct. 31
Coppei Creek	Mouth to Headwaters	Date of Adoption	April 1 - Nov. 10
Doan Creek	Mouth to Headwaters	Date of Adoption	June 1 - Oct. 1
Mud Creek	Mouth to Headwaters	Date of Adoption	May 1 - Oct. 31 or whenever Walla Walla below confluence with Mud Creek falls below 50 cfs.
Pine Creek	Mouth to Headwaters	Date of Adoption	May 1 - Oct. 31 or whenever Walla Walla River at confluence with Pine Creek or below Touchet River drops below 50 cfs.
Stone Creek	Mouth to Headwaters	Date of Adoption	May 1 - Oct. 31

*Exception for single-domestic and stock water where no other practical source is available.

[Order DE 77-30, § 173-532-040, filed 12/14/77.]

WAC 173-532-050 Protection of surface water rights from new appropriators of ground water. New appropriators of ground water will be required to locate wells outside of the zone of direct hydraulic continuity between the surface water stream and the ground water aquifer. The actual limits of the zone of direct hydraulic continuity at a specific location will be determined by the department after an individual ground water application is received. The department will use accepted engineering methods for its determination.

[Order DE 77-30, § 173-532-050, filed 12/14/77.]

WAC 173-532-060 Designation of ground water areas for specific uses. A portion of the ground water resource in the Walla Walla-College Place vicinity is designated for the anticipated growth of the community. Within the following area, ground water in the basalt aquifer is limited to appropriation for municipal water supply systems only, and ground water in the shallow gravel aquifer is limited to uses other than municipal water supply systems:

All the area contained within the following listed sections: Sections 35 and 36, T8N, R35E; sections 1, 2, 11, 12, 13, 14, 15, 23, 24, 25, 26, 27, 28, 34, 35, and 36, T7N, R35E; sections 1, 2, 3, 10, 11, 12, and all of 13, 14, and 15 lying within Washington state, T6N, R35E; sections 31, 32, 33, 34, 35, and 36, T8N, R36E; all the area within T7N, R36E; all the area within T6N, R36E lying within the state of Washington; section 31, T8N, R37E; sections 6, 7, 18, 19, 30, and 31, T7N, R37E; and sections 6, 7, and all of section 18 lying within Washington state, T6N, R37E.

The provisional designation of water in the basalt aquifer for municipal water supply systems shall be effective for a period from February 1, 1978 to October 1, 1984. After October 1, 1984, all designated waters not appropriated or reserved under chapter 173-590 WAC reservation of water for future public water supply, shall be open for appropriations by other users as determined by the department.

The designation of water in the gravel aquifer for users other than municipal water supply systems shall remain indefinitely until changed by the department.

[Statutory Authority: RCW 90.54.050. 83-02-039 (Order DE 82-46), § 173-532-060, filed 12/30/82; Order DE 77-30, § 173-532-060, filed 12/14/77.]

WAC 173-532-070 Closure of ground water aquifer to further appropriation. When the department determines that annual ground water withdrawals from the basalt aquifer have reached 125,000 acre-feet, which is approximately 95 percent of the average annual recharge to that aquifer, the aquifer will be closed to further appropriation.

[Order DE 77-30, § 173-532-070, filed 12/14/77.]

WAC 173-532-080 Evaluation of ground water applications. Each new application for ground water appropriation will be evaluated to minimize interference with existing wells and with adjacent surface water streams. The department will issue permits for ground water withdrawal in those cases where senior surface water and ground water rights will not be adversely affected as determined by the department.

[Order DE 77-30, § 173-532-080, filed 12/14/77.]

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.]

WAC 173-532-110 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 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-532-110, filed 6/9/88.]

Chapter 173-545 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—WENATCHEE RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 45

WAC

WAC 173-545-010 General provision. These rules apply to waters within the Wenatchee River basin, WRIA 45, as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), chapter 75.20 RCW (state fisheries code) and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-010, filed 6/3/83.]

WAC 173-545-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Wenatchee River basin with instream flows and levels necessary to provide protection for wildlife, fish, scenic, aesthetic, and environmental values, recreation, navigation, and water quality.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-020, filed 6/3/83.]

WAC 173-545-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township, and Range	Affected Stream Reach(es) including Tributaries
12-4570.00 Wenatchee River at Plain	46.2 Sec. 12, T. 26N., R. 17E. W.M	From Plain Road Bridge, R.M. 46.2, to headwaters
12-4585.00 Icicle Cr. near Leavenworth	1.5 Sec. 24, T. 24N., R. 17E. W.M	Headwaters of Icicle Creek to its mouth
12-4590.00 Wenatchee River at Peshastin	21.5 Sec. 8, T. 24N., R. 18E. W.M	From confluence of Derby Creek to Plain Road Bridge, R.M. 46.2 excluding Derby Creek and Icicle Creek
12-4625.00 Wenatchee River at Monitor	7.0 Sec. 11, T. 23N., R. 19E. W.M	From mouth to confluence of Derby Creek, including Derby Creek and excluding Mission Creek
12-4620.00 Mission Creek near Cashmere	1.5 Sec. 8, T. 23N, R. 19E. W.M	From mouth to headwaters

(2) Instream flows are established for the stream management units in WAC 173-545-030(1) as follows:

Instream Flows in the Wenatchee River basin
(instantaneous cubic feet per second)

Month	Day	12-4570.00 Wenatchee R. at Plain	12-4580.00 Icicle Cr. near Leavenworth	12-4590.00 Wenatchee R. at Peshastin
Jan	1	550	120	700
	15	550	120	700
Feb	1	550	120	700
	15	550	120	700
Mar	1	550	150	750
	15	700	170	940
Apr	1	910	200	1300
	15	1150	300	1750
May	1	1500	450	2200
	15	2000	660	2800
Jun	1	2500	1000	3500
	15	2000	660	2600
Jul	1	1500	450	1900
	15	1200	300	1400
Aug	1	880	200	1000
	15	700	170	840
Sep	1	660	130	820
	15	620	130	780
Oct	1	580	130	750
	15	520	130	700
Nov	1	550	150	750
	15	550	150	750
Dec	1	550	150	750
	15	550	150	750

Instream Flows in the Wenatchee River basin (cont'd)
(instantaneous cubic feet per second)

Month	Day	12-4620.00 Mission Cr. near Cashmere	12-4625.00 Wenatchee R. at Monitor
Jan	1	6	820
	15	6	820
Feb	1	6	820
	15	6	800
Mar	1	6	800
	15	11	1040
Apr	1	22	1350
	15	40	1750
May	1	40	2200
	15	40	2800
Jun	1	28	3500
	15	20	2400
Jul	1	14	1700
	15	10	1200
Aug	1	7	800
	15	5	700
Sep	1	4	700
	15	4	700
Oct	1	4	700
	15	5	700
Nov	1	6	800
	15	6	800
Dec	1	6	800
	15	6	800

(3) Instream flow hydrographs, as represented in the document entitled "Wenatchee River basin instream resources protection program, figs. 7, 8, 9, pgs. 30 and 31," shall be used for identification of instream flows on those days not specifically identified in WAC 173-545-030(2).

(4) Future consumptive water right permits issued hereafter for diversion of surface water from the main stem Wenatchee River and perennial tributaries shall be expressly subject to instream flows established in WAC 173-545-030 (1) through (3) as measured at the appropriate gage, preferably the nearest one downstream, except for those exemptions described in WAC 173-545-070 (1) through (3).

(5) Projects that would reduce the flow in a portion of a stream's length (e.g.: hydroelectric diversion projects) will be considered consumptive with respect to the bypassed portion of the stream and will be subject to specific instream flow requirements as specified by the department for the bypassed reach notwithstanding WAC 173-545-030 (1) through (3). The department may require detailed, project-specific instream flow studies to determine a specific instream flow for the bypassed reach.

(6) If department investigations determine that withdrawal of ground water from the source aquifers would not interfere significantly with stream flow during the period of stream closure or with maintenance of minimum flows, then

applications to appropriate public ground waters may be approved and permits or certificates issued.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-030, filed 6/3/83.]

WAC 173-545-040 Stream closure. The department has determined that additional diversions of water from Peshastin Creek during the period June 15 to October 15 would deplete instream flows required to protect instream values. Peshastin Creek is, therefore, closed to further consumptive appropriation from June 15 to October 15 each year. During the nonclosed period, minimum instream flows will be controlled and measured from the control station on the Wenatchee River at Monitor.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-040, filed 6/3/83.]

WAC 173-545-050 Policy statement for future permitting actions. Consistent with the provisions of chapter 90.54 RCW, it is the policy of the department to preserve an appropriate base flow in all streams and rivers as well as the water levels in all lakes in the Wenatchee River basin by encouraging the use of alternate sources of water which include (1) ground water, (2) storage water, or (3) purchase of other valid water rights.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-050, filed 6/3/83.]

WAC 173-545-060 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-060, filed 6/3/83.]

WAC 173-545-070 Exemptions. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Future requests for group domestic uses, including municipal supply, may be exempted from the minimum instream flow provisions of this chapter when it is determined by the department, in consultation with the departments of fisheries and game, that overriding considerations of the public interest will be served.

(3) Single domestic and stockwatering use, except that related to feedlots, shall be exempt from the provisions established in this chapter. If the cumulative impacts of numerous single domestic diversions would significantly affect the quantity of water available for instream uses, then only single domestic in-house use shall be exempt if no alternative source is available.

(4) Nonconsumptive uses which are compatible with the intent of the chapter may be approved.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-070, filed 6/3/83.]

WAC 173-545-080 Future rights. No rights to divert or store public surface waters of the Wenatchee River basin, WRIA 45, shall hereafter be granted which shall conflict with the purpose of this chapter.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-080, filed 6/3/83.]

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 43.21B, 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

WAC 173-548-010 General provision. These rules, including any subsequent additions and amendments, apply to waters within and contributing to the Methow River basin, WRIA 48 (see WAC 173-500-040). Chapter 173-500 WAC, the general rules of the department of ecology for the implementation of the comprehensive water resources program, applies to this chapter 173-548 WAC.

[Order DE 76-37, § 173-548-010, filed 12/28/76.]

WAC 173-548-020 Establishment of base flows. (1) Base flows are established for stream management units with monitoring to take place at certain control points as follows:

STREAM MANAGEMENT UNIT INFORMATION

Stream Management Unit Name, Control Station Name and Number	Control Station Location by River Mile, Section, Township, Range	Affected Stream Reach (includes tributaries)
Lower Methow		
Methow R. nr. Pateros (12.4499.50)	6.7 20-30-23E	Methow River confluence with Wells Pool to confluence with Twisp River.
Middle Methow		
Methow R. nr. Twisp (12.4495.00)	40.0 17-33-22E	Methow River from confluence with Twisp River to confluence with Chewack River.
Upper Methow		
Methow R. nr. Winthrop (12.4473.89)	50.2 2-34-21E	Methow River from confluence with Chewack River to confluence with Little Boulder Creek and including Little Boulder Creek.
Methow Headwaters		
Methow R. at Little Boulder Cr. (12.4473.83)	65.3 25-36-19E	Methow River from confluence with Little Boulder Creek to headwaters.
Early Winters Creek		
Early Winters Cr. near Mazama	27-36-19E	Early Winters Creek from confluence with Methow River to headwaters.
Chewack River		
Chewack R. nr. Boulder Creek (12.4475.00)	8.7 35-36-21E	Chewack River confluence with Methow River to headwaters.
Twisp River		
Twisp R. nr. Twisp (12.4489.98)	0.3 7-33-22E	Twisp River from confluence with Methow River to headwaters.

(2) Base flows established for the stream management units in WAC 173-548-020(1) are as follows:

Base Flows in the Methow River
(All Figures in Cubic Feet Per Second)

[CODIFICATION NOTE: The graphic presentation of this table has been varied slightly in order that it would fall within the printing specification for the Washington Administrative Code. The following table was too wide to be accommodated in the width of the WAC column. The table as codified has been divided into two tables with Part 1 covering the Lower Methow, Middle Methow and Upper Methow and with Part 2 covering the Methow Headwaters, Early Winters Creek, Chewack River and Twisp River.]

PART 1

Month	Day	Lower Methow (12.4499.50)	Middle Methow (12.4495.00)	Upper Methow (12.4473.89)
Jan.	1	350	260	120
	15	350	260	120
Feb.	1	350	260	120
	15	350	260	120
Mar.	1	350	260	120
	15	350	260	120
Apr.	1	590	430	199
	15	860	650	300
May	1	1,300	1,000	480
	15	1,940	1,500	690
Jun.	1	2,220	1,500	790
	15	2,220	1,500	790
Jul.	1	2,150	1,500	694
	15	800	500	240
Aug.	1	480	325	153
	15	300	220	100
Sep.	1	300	220	100
	15	300	220	100
Oct.	1	360	260	122
	15	425	320	150
Nov.	1	425	320	150
	15	425	320	150
Dec.	1	390	290	135
	15	350	260	120

PART 2

Month	Day	Methow Headwaters (12.4473.83)	Early Winters Creek	Chewack River (12.4475.00)	Twisp River (12.4489.98)
Jan.	1	42	10	56	34
	15	42	10	56	34
Feb.	1	42	10	56	34
	15	42	10	56	34
Mar.	1	42	10	56	34
	15	42	10	56	34
Apr.	1	64	14	90	60
	15	90	23	140	100
May	1	130	32	215	170
	15	430	108	290	300
Jun.	1	1,160	290	320	440
	15	1,160	290	320	440
Jul.	1	500	125	292	390
	15	180	45	110	130
Aug.	1	75	20	70	58
	15	32	8	47	27
Sep.	1	32	8	47	27
	15	32	8	47	27
Oct.	1	45	11	56	35
	15	60	15	68	45
Nov.	1	60	15	68	45
	15	60	15	68	45
Dec.	1	51	12	62	39
	15	42	10	56	34

(3) Base flow hydrographs, as represented in Figure 1 in the document entitled "water resources management program, Methow River basin" dated 1976, shall be used for definition of base flows on those days not specifically identified in WAC 173-548-020(2) and 173-548-030.

(4) All rights hereafter established shall be subject to the base flows established in WAC 173-548-020 (1) through (3), except as provided under WAC 173-548-030 herein.

(5) Future appropriations of water which would conflict with base flows shall be authorized, by the director, only in those situations when it is clear that overriding considerations of the public interest will be served.

[Order DE 76-37, § 173-548-020, filed 12/28/76.]

WAC 173-548-030 Future allocations—Reservation of surface water for beneficial uses. (1) The department

determines that there are surface waters available for appropriation from the stream management units specified in the amount specified in cubic feet per second (cfs) during the time specified as follows:

(a) Maximum surface water available for future allocation from the indicated reach is as follows:

Month	Lower Methow	Middle Methow	Upper Methow	Methow Headwaters	Early Winters Creek	Chewack River	Twisp River
Oct.	95	50	44	15	29	09	14
Nov.	116	101	46	06	21	10	15
Dec.	112	99	44	17	26	10	15
Jan.	50	36	26	08	19	03	09
Feb.	51	37	29	09	19	04	10
Mar.	147	139	80	38	19	24	18
Apr.	565	590	273	336	35	118	148
May	2,922	2,927	784	412	403	809	703
Jun.	3,116	2,853	1,017	1,249	294	1,292	890
Jul.	965	877	583	608	189	308	298
Aug.	214	192	203	109	94	70	70
Sep.	62	55	76	33	47	23	26

All figures in cubic feet per second.

(b) The control station for each reach is defined in WAC 173-548-020.

(c) The appropriation limit is set forth to be an amount equal to the one in two year natural reach discharge on a monthly basis for all management reaches except Early Winters Creek. The appropriation limit for Early Winters Creek is set forth to be an amount equal to the estimated natural mean monthly streamflow for that stream.

(2) The amounts of water referred to in WAC 173-548-030(1) above are allocated for beneficial uses in the future as follows:

(a) Allocation of surface waters by use category (April through September):

Use Description	Apr.	May	Jun.	Jul.	Aug.	Sep.
Lower Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	860	1,940	2,220	800	300	300
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Middle Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	650	1,500	1,500	500	220	220
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Upper Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	300	690	790	240	100	100
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Methow Headwaters						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	90	430	1,160	180	32	32
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Early Winters Creek						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	23	108	290	45	8.0	11.0
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Chewack River						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	140	290	320	110	47	47
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Twisp River						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	100	300	440	130	27	27
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					

All figures in cubic feet per second

(b) Allocation of surface waters by use category (October through March):

Use Description	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Lower Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	425	425	350	350	350	350
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Middle Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	320	320	260	260	260	260
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Upper Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	150	150	120	120	120	120

Use Description	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Methow Headwaters						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	60	60	42	42	42	42
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Early Winters Creek						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	15	15	10	10	10	10
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Chewack River						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	68	68	56	56	56	56
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Twisp River						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	45	45	34	34	34	34
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					

All figures in cubic feet per second.

(c) Allocations presented in this section do not limit the utilization of waters stored for later release, provided such storage does not infringe upon existing rights or base flow and is duly permitted under RCW 90.03.290 and 90.03.350.

(d) As the amount of water allocated for each category of use approaches the amount available for future allocation set forth in WAC 173-548-030(1), the department shall review the program to determine whether there is a need for program revision.

[Order DE 76-37, § 173-548-030, filed 12/28/76.]

WAC 173-548-040 Priority of future water rights during times of water shortage. (1) As between rights established in the future pertaining to waters allocated in WAC 173-548-030 (2)(a) and (b), all rights subject to this program shall be regulated in descending order of use category priority regardless of the date of the priority of right.

(2) As between rights established in the future within a single use category allocation of WAC 173-548-030, the date of priority shall control with an earlier dated right being superior to those rights with later dates.

[Order DE 76-37, § 173-548-040, filed 12/28/76.]

WAC 173-548-050 Streams and lakes closed to further consumptive appropriations. The department, having determined based on existing information that there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the streams and lakes listed in (a) and (b), and ground water hydraulically connected with these surface waters to further consumptive appropriation[.] This includes rights to use water consumptively established through permit procedures and ground water withdrawals otherwise exempted from permit under RCW 90.44.050. Specific situations in which well construction may be approved are identified.

No wells shall be constructed for any purposes, including those exempt from permitting under RCW 90.44.050, unless one or more of the following conditions have been met and construction of the well has been approved in writing by the department prior to the beginning of well construction:

(1) The proponent has a valid water right permit recognized by the department. For an existing community domestic use, a water right permit must be held by a purveyor of an approved system. (For the purposes of this chapter, an approved water system is one in compliance with the state drinking water regulations, chapter 246-290 WAC and the state surface and ground water codes, chapters 90.03 and 90.44 RCW); or

(2) The proponent has obtained a valid state surface or ground water right through a transfer approved by the department under the statutory authority of chapter 90.03 or 90.44 RCW; or

(3) The proponent is replacing or modifying an existing well developed under the exemption from permit clause of RCW 90.44.050 and this has been approved in writing by the department; or,

(4) If the ground water being sought for withdrawal has been determined by the department not to be hydraulically connected with surface waters listed as closed, the department may approve a withdrawal. When insufficient evidence is available to the department to make a determination that ground and surface waters are not hydraulically connected, the department shall not approve the withdrawal of ground water unless the person proposing to withdraw the ground water provides additional information sufficient for the department to determine that hydraulic continuity does not exist and that water is available.

(a) STREAM CLOSURES

The following streams are closed all year, including all ground waters hydraulically connected to these streams.

Stream Name (Includes Tributaries)
Wolf Creek
Bear Creek (Davis Lake)
Thompson Creek
Beaver Creek
Alder Creek
Benson Creek
Texas Creek
Libby Creek
Cow Creek

Stream Name (Includes Tributaries)
Gold Creek
McFarland Creek
Squaw Creek
Black Canyon Creek
French Creek

(b) LAKE CLOSURES

The following lakes are closed all year, including all ground waters hydraulically connected to these lakes:

Name	Location
Alta Lake	3 mi. SW of Pateros
Black Lake	25 mi. N of Winthrop
Black Pine Lake	9 mi. SW of Twisp
Crater Lake	10 mi. W of Carlton
Davis Lake	Bear Creek Drainage
Eagle Lake	11 mi. SW of Carlton
French Creek	Sec.28, T.31N., R.23E.
Libby Lake	10 mi. W of Carlton
Louis Lake	20 mi. W of Winthrop
Middle Oval Lake	16 mi. W of Carlton
North Lake	20 mi. W of Winthrop
Patterson Lake	Sec.8, T.34N., R.21E.
Pearrygin Lake	Sec.36, T.35N., R.21E.
Slate Lake	14 mi. W of Winthrop
Sunrise Lake	16 mi. W of Methow
Upper Eagle Lake	12 mi. W of Carlton
West Oval Lake	16 mi. W of Carlton

[Statutory Authority: Chapters 34.05, 90.54, 18.104, 90.03 and 90.44 RCW. 91-23-093 (Order 91-27), § 173-548-050, filed 11/19/91, effective 12/20/91; Order DE 76-37, § 173-548-050, filed 12/28/76.]

WAC 173-548-060 Ground water. If it is determined that a future development of ground water measurably affects surface waters subject to the provisions of chapter 173-548 WAC, then rights to said ground water shall be subject to the same conditions as affected surface waters.

[Order DE 76-37, § 173-548-060, filed 12/28/76.]

WAC 173-548-070 Effect on prior rights. Nothing in this chapter shall be construed to lessen, enlarge, or modify existing rights acquired by appropriation or otherwise, and legally vested prior to the effective date of this chapter.

[Order DE 76-37, § 173-548-070, filed 12/28/76.]

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

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-549-030 Future allocations—Reservation of surface water for beneficial uses. [Order DE 76-25, § 173-549-030, filed 7/14/76.] Repealed by 84-13-076 (Order DE 84-15), filed 6/20/84. Statutory Authority: Chapters 90.54 and 90.22 RCW.

173-549-040 Priority of future water rights during times of water shortage. [Order DE 76-25, § 173-549-040, filed 7/14/76.] Repealed by 84-13-076 (Order DE 84-15), filed 6/20/84. Statutory Authority: Chapters 90.54 and 90.22 RCW.

173-549-050 Streams and lakes closed to further consumptive appropriations. [Order DE 76-25, § 173-549-050, filed 7/14/76.] Repealed by 84-13-076 (Order DE 84-15), filed 6/20/84. Statutory Authority: Chapters 90.54 and 90.22 RCW.

WAC 173-549-010 General provision. These rules apply to waters within the Okanogan River Basin (WRIA 49) as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (the Water Resources Act of 1971) and chapter 90.22 RCW (Minimum water flows and levels) and in accordance with chapter 173-500 WAC (Water resources management program).

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-010, filed 6/20/84; Order DE 76-25, § 173-549-010, filed 7/14/76.]

WAC 173-549-015 Purpose. Chapter 90.54 RCW (the Water Resources Act of 1971) requires that utilization and management of the waters of the state shall be guided by a number of fundamentals, including the following:

"(1) Uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation,

hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state, are declared to be beneficial." (RCW 90.54.020(1).)

The act further specifies that "Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values." (RCW 90.54.020 (3)(a).)

The purpose of this chapter is to satisfy the requirements of RCW 90.54.020 (3)(a) while, at the same time, allowing the continued use of water for other beneficial uses such as agriculture, which is acknowledged as a vital activity greatly benefiting the citizens of the Okanogan Basin and the state of Washington.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-015, filed 6/20/84.]

WAC 173-549-016 Definition. For the purposes of this chapter, the term minimum instream flow shall be synonymous with the term base flow as defined in chapter 90.54 RCW and the term minimum flow as defined in chapter 90.22 RCW.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-016, filed 6/20/84.]

WAC 173-549-020 Establishment of minimum instream flows. (1) Minimum instream flows are established for stream management units with monitoring to take place at certain control points as follows:

Stream Management Unit Information

Stream Management Unit Name, Control Station Name and Number	Control Station Location by River Mile, Section, Township, Range	Affected Stream Reach
Lower Okanogan		
Okanogan R. at Malott (12447200)	17.0, 9-32-25E	Okanogan River confluence with Wells Pool to confluence of Chewiliken Cr.
Middle Okanogan		
Okanogan R. nr. Tonasket (12445000)	50.8, 8-36-27E	Okanogan River confluence of Chewiliken Creek to confluence Similkameen River
Upper Okanogan		
Okanogan R. at Oroville (12439500)	77.3, 27-40-27E	Okanogan River confluence of Similkameen River to Osoyoos Lake
Similkameen		
Similkameen R. at Nighthawk (12442500)	15.8, 7-40-26E	Similkameen River confluence with Okanogan River to Canadian Border

(2) Minimum instream flows established for the stream management units in WAC 173-549-020(1) are as follows:

Minimum Instream Flows in the Okanogan River
(All Figures in Cubic Feet Per Second)

Month	Day	Lower Okanogan 12447200	Middle Okanogan 1244500	Upper Okanogan 124426000	Similkameen 12439500
Jan.	1	860	800	320	400
	15	830	800	320	400
Feb.	1	820	800	320	400
	15	850	800	320	400
Mar.	1	880	800	320	425
	15	900	800	320	450
Apr.	1	925	910	330	510
	15	1,100	1,070	340	640
May	1	1,750	1,200	350	1,100
	15	3,800	3,800	500	3,400
Jun.	1	3,800	3,800	500	3,400
	15	3,800	3,800	500	3,400
Jul.	1	2,100	2,150	420	1,900
	15	1,200	1,200	350	1,070
Aug.	1	800	840	320	690
	15	600	600	300	440
Sept.	1	620	600	300	400
	15	700	600	300	400
Oct.	1	750	730	330	450
	15	960	900	370	500
Nov.	1	950	900	370	500
	15	950	900	320	500
Dec.	1	930	900	320	500
	15	900	850	320	450

(3) Minimum instream flow hydrographs, as represented in WAC 173-549-900, shall be used for definition of minimum instream flows on those days not specifically identified in WAC 173-549-020(2).

(4) Future consumptive water right permits hereafter issued for diversion of surface water from the mainstem Okanogan River and the Similkameen River shall be expressly subject to minimum instream flows established in WAC 173-549-020 (1) through (3) except those described in WAC 173-549-070.

(5) Projects that would reduce the flow in a portion of a stream's length (e.g. hydroelectric projects that bypass a portion of a stream) will be considered consumptive only with respect to the affected portion of the stream. Such projects will be subject to instream flows as specified by the department. These flows may be those established in WAC 173-549-020 or, when appropriate, may be flows specifically tailored to that particular project and stream reach. When studies are required to determine such reach- and project-specific flow requirements, the department may require the project proponent to conduct such studies.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-020, filed 6/20/84; Order DE 76-25, § 173-549-020, filed 7/14/76.]

WAC 173-549-025 Stream closures. (1) Consistent with the provisions of chapter 90.54 RCW, it is the policy of

the department to preserve an appropriate minimum instream flow in all perennial streams and rivers of the Okanogan River Basin for protection of instream values.

(2) In keeping with this policy, a partial year closure from May 1 to October 1 will be established on all perennial streams in the basin except those with established minimum instream flows as described in WAC 173-549-020.

(3) The upper Okanogan stream management unit as established in WAC 173-549-020(1) is closed to further consumptive appropriation from June 15 through August 31 with the exception of single-domestic use and stockwatering use, provided that no alternative source of supply is available.

(4) When a project (as described in WAC 173-549-020(5)) is proposed on a stream that is closed to further appropriations, the department shall deny the water right application unless the project proponent can adequately demonstrate that the project does not conflict with the intent of the closure.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-025, filed 6/20/84.]

WAC 173-549-027 Policy statement for future permitting actions. (1) Consistent with the provisions of chapter 90.54 RCW, it is the policy of the department to preserve an appropriate minimum instream flow in all perennial streams and rivers as well as the water levels in all lakes in the Okanogan River Basin by encouraging the use of alternate sources of water which include (a) ground water, (b) storage water, or (c) acquisition of existing water rights.

(2) All future permits to appropriate water from the Okanagan River, the Similkameen River and perennial tributaries shall be subject to the required flows at all downstream control stations as established in WAC 173-549-020.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-027, filed 6/20/84.]

WAC 173-549-035 Lakes. (1) In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. In considering future water right applications, the department shall deny any application for surface or ground water which will result in a significant decrease in lake level or in the stream flow of any stream draining the lake, except that no decrease in stream flow shall be allowed during the May 1 - October 1 stream closure period.

(2) Notwithstanding the above, nothing in this chapter shall limit the utilization of waters stored for later release, provided such storage does not infringe upon existing rights or instream flow and is duly permitted under RCW 90.03.290 and 90.03.350.

(3) Any future water rights for waters from Osoyoos Lake or from ground waters determined to be in significant hydraulic continuity with Osoyoos Lake, issued after the effective date of this chapter and upon completion of the new Osoyoos Lake outlet control structure, shall be subject to the maintenance of a water surface level of 910.5 feet USCGS in Osoyoos Lake and said diversions shall be curtailed when the lake elevation drops below elevation 910.5 feet USCGS.

(4) Notwithstanding the provisions of this chapter, the construction and operation of the proposed new outlet control structure for Osoyoos Lake shall be consistent with the terms and conditions of the International Joint Commission Order of Approval signed on December 9, 1982, pursuant to the 1909 Boundary Waters Treaty.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-035, filed 6/20/84.]

WAC 173-549-060 Ground water. If department investigations determine that there is significant hydraulic continuity between surface water and the proposed ground water source, any water right permit or certificate issued shall be subject to the same conditions as affected surface waters. If department investigations determine that withdrawal of ground water from the source aquifers would not interfere with stream flow during the period of stream closure or with maintenance of minimum instream flows, then applications to appropriate public ground waters may be approved.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-060, filed 6/20/84; Order DE 76-25, § 173-549-060, filed 7/14/76.]

WAC 173-549-070 Effect on prior rights and exemptions. (1) Nothing in this chapter shall affect any existing water rights including, among others, riparian, appropriative, and federal Indian and non-Indian reserved rights, existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Single domestic use and stockwatering use shall be exempt from the provisions established in this chapter except that, when the cumulative impacts of numerous domestic diversions begins to significantly affect the quantity of water available for instream uses or the maintenance of lake levels, then any water rights issued after that time shall be issued only for in-house use if no alternative supply is available.

(3) Nonconsumptive uses which are compatible with the intent of the chapter may be approved.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-070, filed 6/20/84; Order DE 76-25, § 173-549-070, filed 7/14/76.]

WAC 173-549-080 Future rights. No rights to divert or store public surface or ground waters of the Okanogan River Basin, WRIA 49, shall hereafter be granted which shall conflict with the purpose of this chapter except as provided in RCW 90.54.020 (3)(a).

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-080, filed 6/20/84.]

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.]

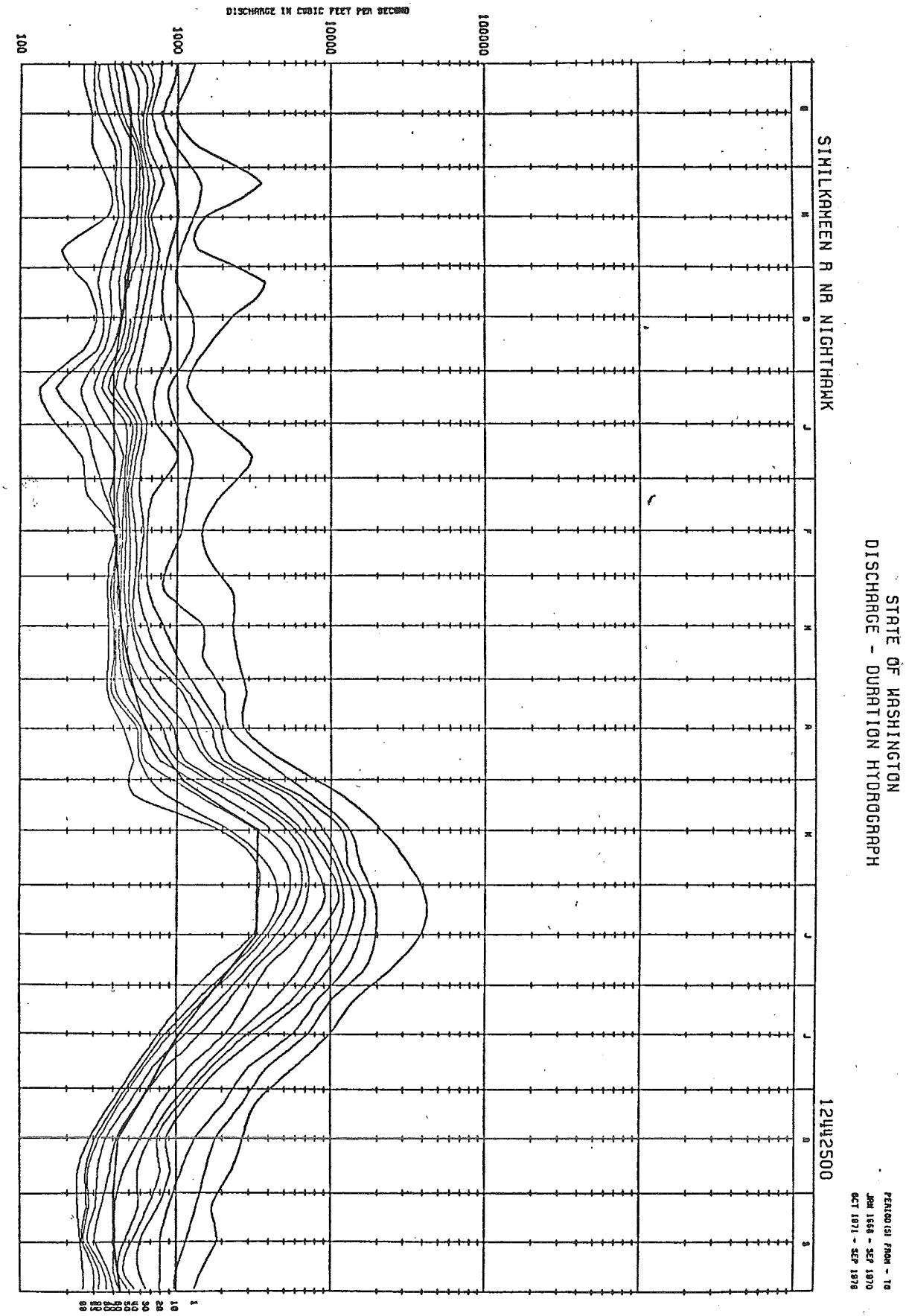
WAC 173-549-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

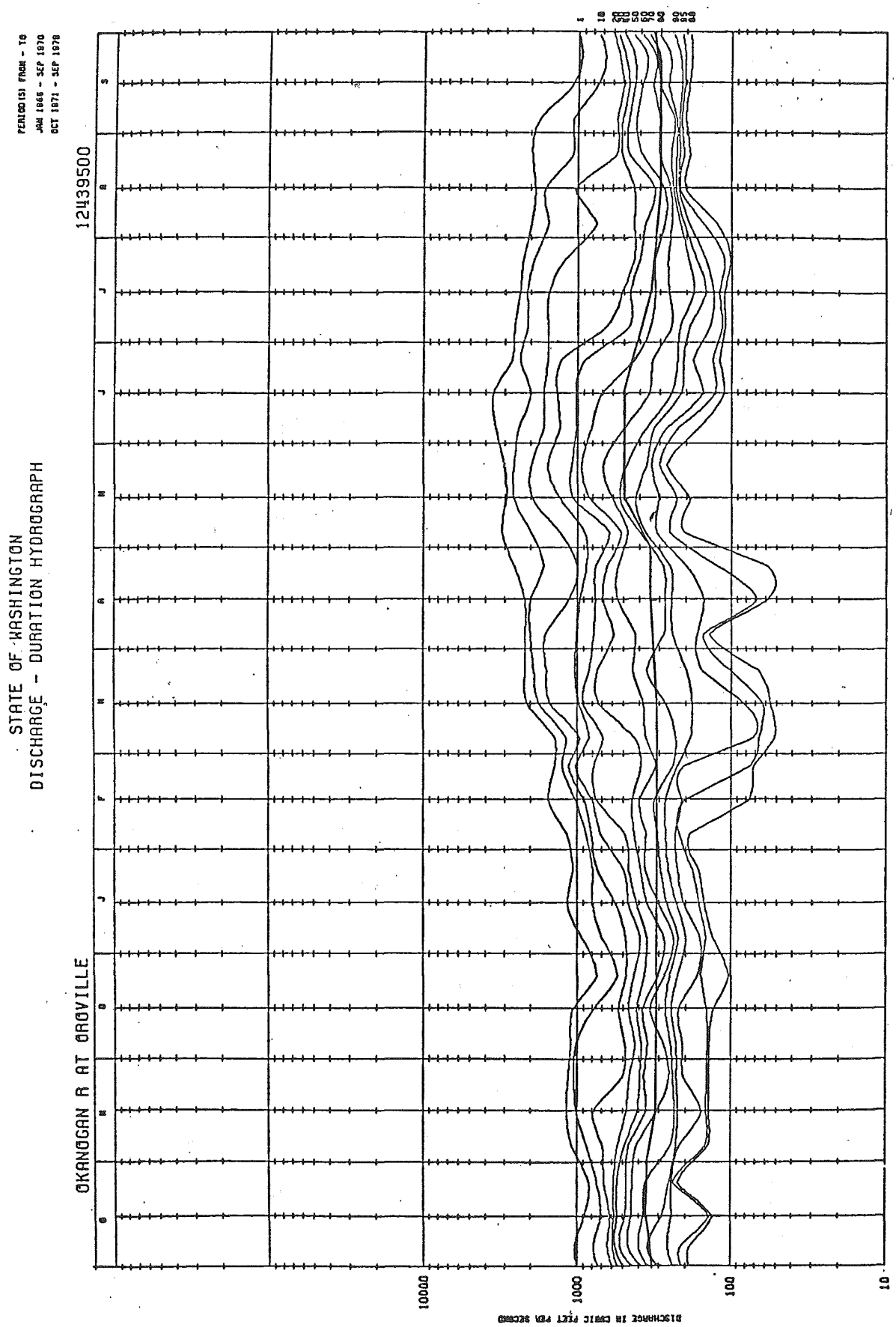
[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-549-095, filed 6/9/88.]

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 6/9/88. Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-100, filed 6/20/84.]

WAC 173-549-900 Minimum instream flow hydrographs.

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DISCHARGE - DURATION HYDROGRAPH
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PERIOD(S) FROM - TO
JAN 1966 - SEP 1970
OCT 1971 - SEP 1978
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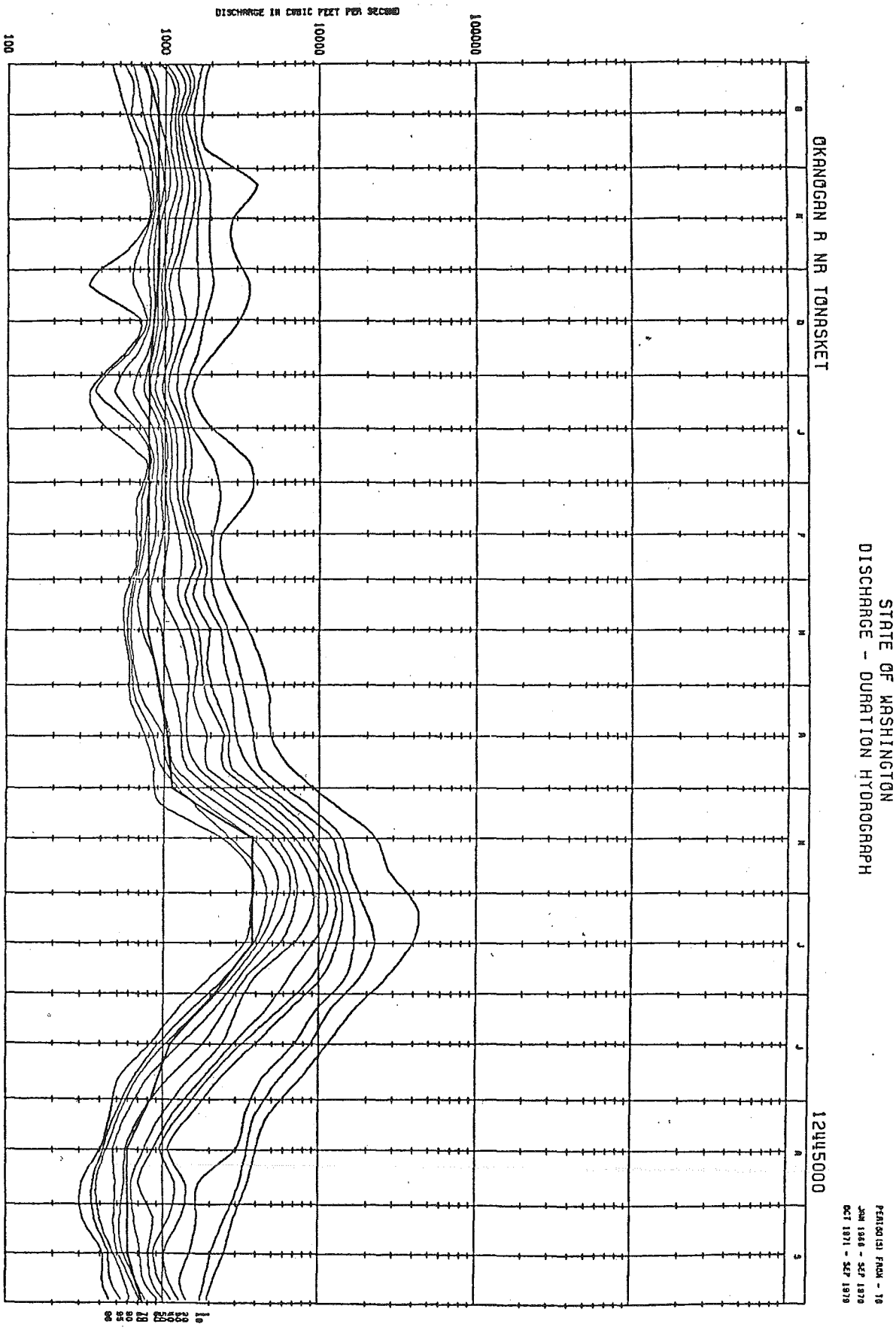
DISCHARGE IN CUBIC FEET PER SECOND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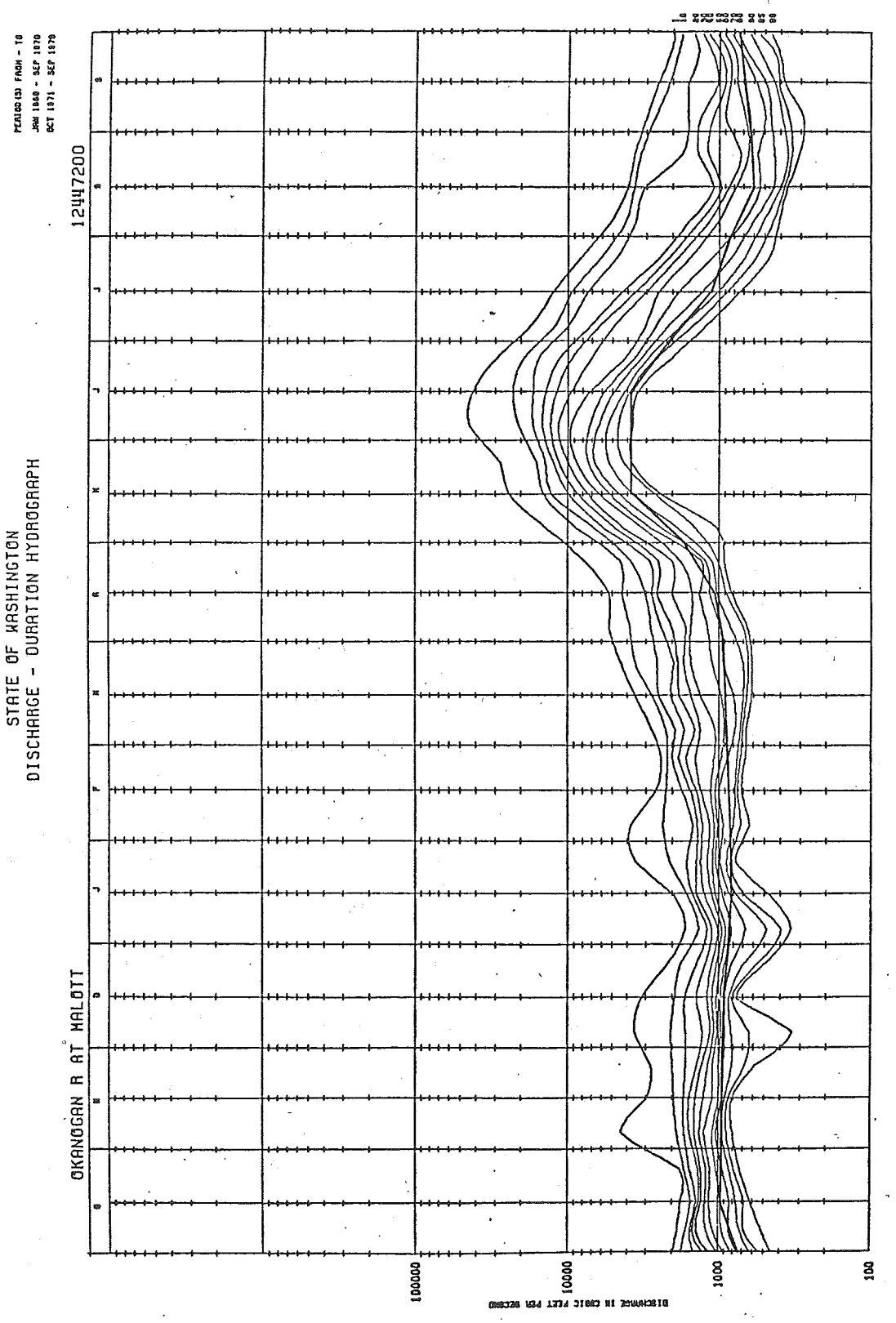
OKANOGAN R NR TONASKET
STATE OF WASHINGTON
DISCHARGE - DURATION HYDROGRAPH
12445000
PERIOD(S) FROM - TO
JAN 1968 - SEP 1970
OCT 1971 - SEP 1978



[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-900, filed 6/20/84.]

Chapter 173-555 WAC

WATER RESOURCES PROGRAM IN THE LITTLE SPOKANE RIVER BASIN, WRIA 55

WAC

WAC 173-555-010 General provision. These rules, including any subsequent additions and amendments, apply to waters within and contributing to the Little Spokane River basin, WRIA-55 (see WAC 173-500-040). Chapter 173-500 WAC, the general rules of the department of ecology for the implementation of the comprehensive water resources program, applies to this chapter 173-555 WAC.

[Order DE 75-24, § 173-555-010, filed 1/6/76.]

WAC 173-555-020 Definition. "NONCOMMERCIAL AGRICULTURAL IRRIGATION" means beneficial use of water upon not more than three acres for the purpose of crops and livestock for domestic use.

[Order DE 75-24, § 173-555-020, filed 1/6/76.]

WAC 173-555-030 Establishment of base flows. (1) Base flows are established for stream management units with monitoring to take place at certain control points as follows:

Stream Management Unit Information

Control Station Number, Stream Management Unit Name	Control Station Location by River Mile and Section, Township Range	Affected Stream Reach
No. 12-4270.00 Little Spokane River Elk	34.6 Sec. 8, T.29N., R.43 E.W.M.	From confluence with Dry Creek to the headwaters including tributaries except Dry Creek.
No. 12-4295.00 Little Spokane River Chattaroy	23.05 Sec. 34, T.28N., R.43 E.W.M.	From confluence with Deer Creek to confluence with Dry Creek including tributaries except Deer Creek.
No. 12-4310.00 Little Spokane River Dartford	10.8 Sec. 6, T.26N., R.43 E.W.M.	From confluence with Little Creek to confluence with Deer Creek including tributaries except Little Creek.
No. 12-4315.00 Little Spokane River Confluence	3.9 Sec. 3, T.26N., R.42 E.W.M.	From mouth to confluence with Little Creek including tributaries.

(2) Base flows established for the stream management units in WAC 173-555-030(1) are as follows:

Base Flows in the Little Spokane River Basin
(in Cubic Feet Per Second)

Month	Day	12-4270.00 Elk	12-4295.00 Chattaroy	12-4310.00 Dartford	12-4315.00 Confluence
Jan.	1	40	86	150	400
	15	40	86	150	400
Feb.	1	40	86	150	400
	15	43	104	170	420
Mar.	1	46	122	190	435
	15	50	143	218	460
Apr.	1	54	165	250	490
	15	52	143	218	460
May	1	49	124	192	440
	15	47	104	170	420
Jun.	1	45	83	148	395
	15	43	69	130	385
Jul.	1	41.5	57	115	375
	15	39.5	57	115	375
Aug.	1	38	57	115	375
	15	38	57	115	375
Sept.	1	38	57	115	375
	15	38	63	123	380
Oct.	1	38	70	130	385
	15	39	77	140	390
Nov.	1	40	86	150	400
	15	40	86	150	400
Dec.	1	40	86	150	400
	15	40	86	150	400

(3) Base Flow hydrographs, Figure II-1 in the document entitled "water resources management program in the Little Spokane River Basin" dated August, 1975 shall be used for definition of base flows on those days not specifically identified in WAC 173-555-030(2).

(4) All rights hereafter established shall be expressly subject to the base flows established in sections WAC 173-555-030 (1) through (3).

[Order DE 75-24, § 173-555-030, filed 1/6/76.]

WAC 173-555-040 Future allocations—Reservation of surface water for beneficial uses. (1) The department determines that these are surface waters available for appropriation from the stream management units specified in the amount specified in cubic feet per second (cfs) during the time specified as follows:

(a) Surface water available from the east branch of the Little Spokane River, confluence with Dry Creek to headwaters, based on measurement at control station number 12-4270.00 at Elk are:

Month	May		June		July		Aug.		Sept.		Oct.	
Date	1	15	1	15	1	15	1	15	1	15	1	15
Amount	26	22	17	14	11	9	5	5	5	5	7	7

(b) Surface water available from the Little Spokane River from confluence with Little Creek at Dartford to Eloika Lake outlet, and to confluence with Dry Creek based on measurement at control station number 12-4310 at Dartford are:

Month	May		June		July		Aug.		Sept.		Oct.	
Date	1	15	1	15	1	15	1	15	1	15	1	15
Amount	340	236	152	103	62	34	11	11	11	11	20	20

(c) Available surface waters for those days not specified in (a) and (b) shall be defined from Figures II-3 and II-4 in the document entitled "water resources management program in the Little Spokane River basin" dated August, 1975.

(2) The amounts of waters referred to in WAC 173-555-040(1) above are allocated for beneficial uses in the future as follows:

(a) Three cubic feet per second from the amount available in the east branch of the Little Spokane River referred to in WAC 173-555-040 (1)(a) above and five cubic feet per second from the amount available in the Little Spokane River, besides east branch, referred to in WAC 173-555-040 (1)(b) are allocated to future domestic, stockwatering and noncommercial agricultural irrigation purposes within the stream reaches specified therein throughout the year.

(b) The remainder of the amount referred to in WAC 173-555-040 (1)(a) and (b) besides the amount specified in WAC 173-555-040 (2)(a) are allocated to consumptive and nonconsumptive uses not specified in WAC 173-555-040 (2)(a). These are further described in the figures appended hereto.

[Order DE 75-24, § 173-555-040, filed 1/6/76.]

WAC 173-555-050 Priority of future water rights during times of water shortage. (1) As between rights established in the future pertaining to waters allocated in WAC 173-555-040 (2)(a) and (b), all rights established in (a) shall be superior to those pertaining to (b) regardless of the date of the priority of right.

(2) As between rights established in the future within a single use category allocation of WAC 173-555-040, the date of priority shall control with an earlier dated right being superior to those rights with later dates.

[Order DE 75-24, § 173-555-050, filed 1/6/76.]

WAC 173-555-060 Streams and lakes closed to further consumptive appropriations. The department, having determined there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the following streams to further consumptive appropriation except for domestic and normal stockwatering purposes excluding feedlot operation:

SURFACE WATER CLOSURES

Stream* Name	Affected Reach	Date of Closure	Period of Closure
Dry Creek	Mouth to headwaters	5-26-1952	1 June-31 Oct.
Otter Creek	Mouth to headwaters	2-23-1971	"
Bear Creek	Mouth to headwaters	4-13-1953	"
Deer Creek	Mouth to headwaters	2-29-1968	"
Dragoon Creek	Mouth to headwaters	7-02-1951	"
Deep Creek	Mouth to headwaters	6-14-1961	"
Deadman Creek[1/]	Mouth to headwaters	11-28-1961	"
Little Creek	Mouth to headwaters	4-13-1953	"
W. Branch Little Spokane River	Outlet of Eloika Lake to headwaters	Date of adoption	"
All natural lakes in the basin		"	"

* Includes all tributaries in the contributing drainage area unless specifically excluded.

1/ An unnamed tributary flowing through Sec. 20, T26N., R.44E. is exempted from closure.

[Order DE 75-24, § 173-555-060, filed 1/6/76.]

WAC 173-555-070 Effect on prior rights. Nothing in this chapter shall be construed to lessen, enlarge or modify the existing rights acquired by appropriation or otherwise.

[Order DE 75-24, § 173-555-070, filed 1/6/76.]

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 173-555-090 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), § 173-555-090, filed 6/9/88.]

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 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-555-100, filed 6/9/88.]

Chapter 173-559 WAC
WATER RESOURCES PROGRAM FOR THE COLVILLE RIVER BASIN, WRIA-59

WAC

WAC 173-559-010 Purpose. This regulation is adopted in accordance with the water resources management regulation, chapter 173-500 WAC, which was promulgated under the authority of the Water Resources Act of 1971, chapter 90.54 RCW. This chapter, including any amendments, applies to all waters that lie within or contribute to the Colville River drainage basin. This chapter sets forth the department's policies to manage the basin's water resources.

[Order DE 77-6, § 173-559-010, filed 7/22/77.]

WAC 173-559-020 Definitions. For purposes of this chapter, the following definitions shall be used.

(1) "Allocation" means the designating of specific amounts of the water resource for specific beneficial uses.

(2) "Base flow" means a level of stream flow established in accordance with provisions of chapter 90.54 RCW required in perennial streams to preserve wildlife, fish, scenic, aesthetic, and other environmental and navigational values.

(3) "Consumptive use" means use of water, whereby there is diminishment of the water resources.

(4) "Department" means the Washington state department of ecology.

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

(6) "Domestic use" means use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, irrigation of not over one-half acre of lawn and garden per dwelling, and other incidental household uses.

(7) "Hydrograph" is a graph showing the variation of streamflow (or stream discharge) with respect to time during a year as determined at a specific cross-sectional location on the stream.

(8) "In-house domestic use" means use of water for drinking, cleaning, sanitation, and other uses in a residence, excluding irrigation of lawn and garden.

(9) "Nonconsumptive use" means a type of water use where either there is no diversion from a source body, or where there is no diminishment of the source.

(10) "Perennial stream" means a stream with a natural flow which is normally continuous at any given location.

(11) "Reservoir permit" means a water right permit which authorizes construction of an impoundment structure, storage of water and generally the use of water in the amount of one filling annually.

(12) "Secondary permit" means a water right permit which allows diversion of water for beneficial use from a storage reservoir. A secondary permit is necessary only for use in excess of one filling annually, or for diversion and use by a party other than the reservoir owner.

(13) "Stream management unit" means a stream segment, reach, or tributary, containing a control station, that is identified on a stream reach map in an adopted water resource management program document as a unit for defining base flow levels.

(14) "Water right" means a right to make beneficial use of public waters of the state.

[Order DE 77-6, § 173-559-020, filed 7/22/77.]

WAC 173-559-030 Establishment of base flows. RCW 90.54.020 requires that perennial rivers and streams shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values and navigational values. Under this provision, base flows for stream management units of a basin are established which describe discharge rates at stream measurement stations in each unit. The following subsections, WAC 173-559-030 (1) through (4), establish these requirements for WRIA 59:

(1) In the Colville River basin, monitoring of base flows will take place at the following control points:

Table 1
Stream Management Units

Stream Management Unit and Control Station Number	Control Station Location by River-Mile, and Section Township and Range	Stream Management Reach
Upper Colville River No. 12.4080.00	32.1 Sec. 31, T. 33 N., R. 40 E.W.M.	Colville River from confluence with Stensgar Creek to confluence of Sheep Creek and Deer Creek.
Lower Colville River No. 12.4090.00	5.0 Sec. 29, T. 36 N., R. 38 E.W.M.	Colville River from confluence with Lake Roosevelt to confluence with Stensgar Creek.

(2) In the Colville River basin, base flows for the stream management units in WAC 173-559-030(1) are set in Table 2 as follows:

Table 2
Base Flows in the Colville River basin
(in Cubic Feet Per Second)

Month	Day	Upper Colville (12.4080.00)	Lower Colville (12.4090.00)
Jan.	1	30	80
	15	30	80
Feb.	1	30	80
	15	38	100
Mar.	1	47	124
	15	59	157

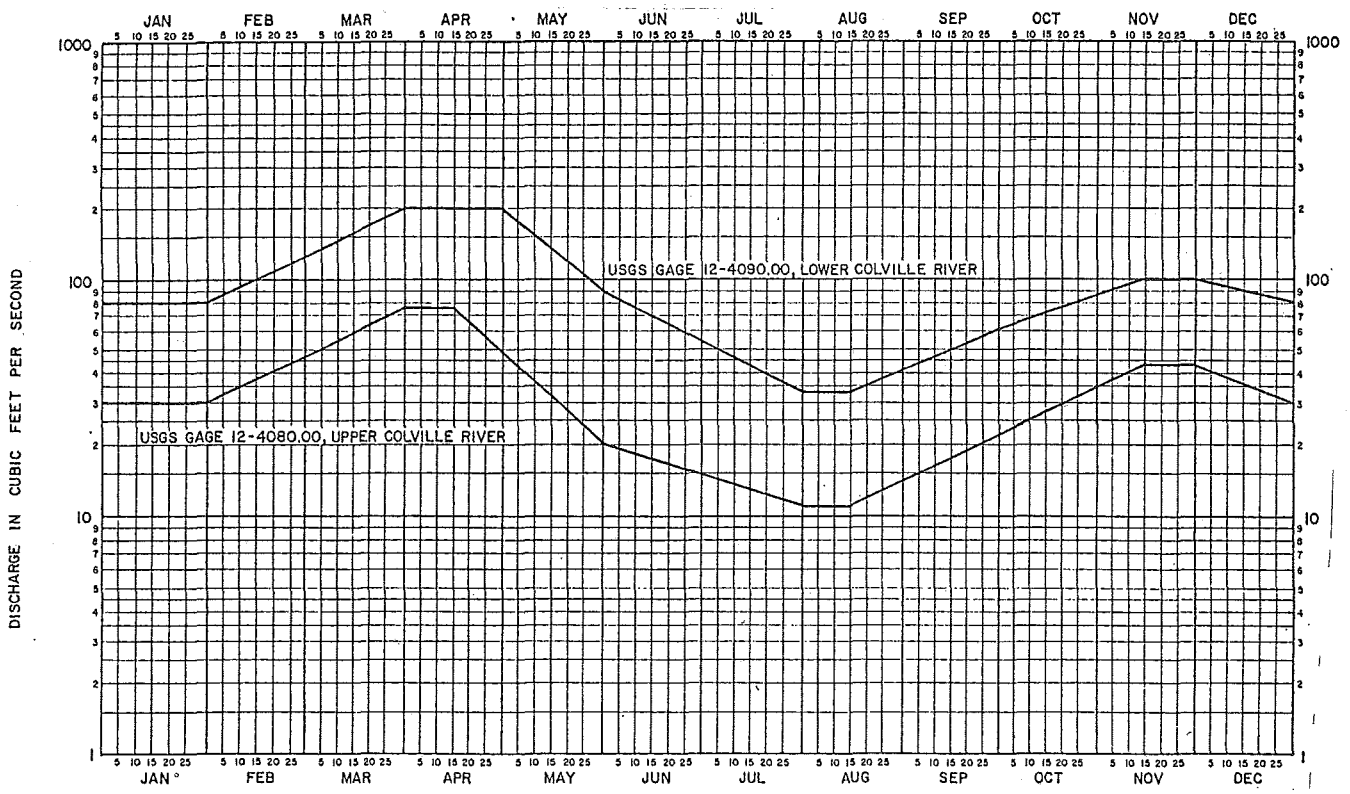
Month	Day	Upper Colville (12.4080.00)	Lower Colville (12.4090.00)
Apr.	1	76	200
	15	76	200
May	1	49	200
	15	32	135
Jun.	1	20	90
	15	17	70
Jul.	1	15	55
	15	13	43
Aug.	1	11	33
	15	11	33
Sep.	1	14	40
	15	18	49
Oct.	1	22	60
	15	27	70
Nov.	1	35	84
	15	43	100
Dec.	1	43	100
	15	36	90

(3) Figure 1, base flow hydrographs for selected stations, shall be used to define base flows on those days not identified in WAC 173-559-030(2).

(4) All surface water rights, established by appropriation in the Upper Colville and Lower Colville stream management units after adoption of this regulation, shall be subject to the base flows set in WAC 173-559-030 (1) through (3). However, these base flows will not apply to in-house domestic use and stock watering use, if an alternate source is not available to satisfy these uses. If the cumulative impact of numerous single in-house domestic use diversions is determined to substantially affect a stream's base flow or existing rights, then new permits for this use may be denied.

Figure 1

BASE FLOW HYDROGRAPH FOR SELECTED STATIONS



[Order DE 77-6, § 173-559-030, filed 7/22/77.]

WAC 173-559-040 Allocation for future surface water appropriations. (1) The department determines that surface water is available for appropriation from the Upper Colville River stream management unit and the Lower Colville River stream management unit except as provided in WAC 173-559-050(2). Tables 3 and 4 show the available amounts in cubic feet per second during specified periods, as follows:

Table 3
Allocation of Public Surface Water from the Upper Colville River Stream Management Unit
(Units in Cubic Feet Per Second)

Month	Base Flow	Future Consumptive Uses
Jan.	30	47
Feb.	41	68
Mar.	61	129
April	44	256
May	20	192
June		
1-15	13	93
	12	18

Table 3
Allocation of Public Surface Water from the Upper Colville River Stream Management Unit
(Units in Cubic Feet Per Second)

Month	Base Flow	Future Consumptive Uses
July		
16-31	12	0
Aug.	11	0
Sept.	17	0
Oct.	27	16
Nov.	43	21
Dec.	36	37

Table 4
Allocation of Public Surface Water from the Lower Colville River Management Unit
(Units in Cubic Feet Per Second)

Month	Base Flow	Future Consumptive Uses
Jan.	80	47
Feb.	100	68
Mar.	157	129
April	200	256
May	135	256
June	70	94
July		
1-15	43	18
16-31	43	0
Aug.	33	0
Sept.	49	0
Oct.	70	17
Nov.	100	21
Dec.	90	37

(2) Total appropriations for nonconsumptive uses may exceed the allocation limits specified in Tables 3 and 4.

(3) Monthly allocations in Tables 3 and 4 do not apply to the use of stored water. Specific provision will be included in all reservoir permits regarding period of filling, use and release of water.

[Order DE 77-6, § 173-559-040, filed 7/22/77.]

WAC 173-559-050 Certain streams and lakes are closed to further consumptive appropriations. (1) The department has determined that no water is available for further consumptive appropriation in streams tributary to the Colville River. Therefore, these tributary streams are closed to further consumptive appropriation except for reservoir storage from November 1 through May 31. Applications for single in-house domestic use, or stockwatering may be approved if no alternate source of water supply is available and the proposed use will not impair existing water rights.

(2) The Upper Colville River and Lower Colville River will be closed to further consumptive appropriation from July 16 through September 30, except for in-house domestic use and normal stockwatering if no alternate source of water supply is available.

(3) If the cumulative impact of numerous single in-house domestic use diversions is determined to substantially affect a closed stream's base flow, then new permits for this use may be denied. Base flow levels for closed streams are specified in the department's publication, "water resources management program, Colville River basin."

(4) Appropriation of water from streams tributary to the Colville River for out of stream storage and on-stream storage shall be subject to the base flows recommended in the department's publication, "water resources management program, Colville River basin."

(5)(a) Lakes included in table 5 are closed to further consumptive appropriation for specified periods of the year, except for in-house domestic and stockwatering uses. The department may deny applications for domestic use if the cumulative effect of such diversions would be detrimental to retaining a lake substantially in its natural condition.

Table 5 Lake Closures

Lake	Tributary to	Location	Period of Closure
Deer Lake	Sheep Creek	T. 30 N., R. 41 E. Secs. 1, 11,12,14	June 1-Oct. 31
Loon Lake	Sheep Creek	T. 30 N., R. 41, E. Secs. 33, 34., T.29 N., R. 41 E. Secs. 2, 3,4,10,11	June 1-Oct. 31
Waitts Lake	Waitts Creek	T. 31 N., R. 40 E. Secs. 17-20	June 1-Oct. 31
Jumpoff Joe Lake	Colville River	T. 31 N., R. 40 E. Sec. 19	June 1-Oct. 31
White Mud Lake		T. 35 N., R. 40 E. Sec. 19.	June 1-Oct. 31
Heritage and Thomas Lakes	Little Pend Oreille River	T. 36 N., R. 42 E. Secs. 8,9, 17,18	June 1-Oct. 31

(b) Appropriation of water from lakes not specified in table 5 will be permitted if prior water rights will not be adversely affected and if the appropriation will not conflict with the intent of RCW 90.54.020 (3)(a) which stipulates, in part, that "lakes and ponds shall be retained substantially in their natural condition."

[Order DE 77-6, § 173-559-050, filed 7/22/77.]

WAC 173-559-060 Ground water. If it is determined that a future development of ground water affects surface waters subject to the provisions of WAC 173-559-030 through 173-559-050, then rights to said ground water shall be subject to the same conditions as affects the surface water.

[Order DE 77-6, § 173-559-060, filed 7/22/77.]

WAC 173-559-070 Effects on prior rights. Nothing in this chapter shall be construed to lessen, enlarge, or modify existing rights acquired by appropriation or by other means.

[Order DE 77-6, § 173-559-070, filed 7/22/77.]

WAC 173-559-080 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 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-559-080, filed 6/9/88.]

WAC 173-559-090 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), § 173-559-090, filed 6/9/88.]

WAC 173-559-100 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), § 173-559-100, filed 6/9/88.]

Chapter 173-563 WAC

INSTREAM RESOURCES PROTECTION PROGRAM FOR THE MAIN STEM COLUMBIA RIVER IN WASHINGTON STATE

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-563-015 Withdrawal of unappropriated waters. [Statutory Authority: Chapter 173-500 WAC, chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW. 95-02-066 (Order 94-18), § 173-563-015, filed 1/3/95, effective 2/3/95. Statutory Authority: Chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW and chapter 173-500 WAC and WAC 173-563-075. 93-01-009 (Order 92-20), § 173-563-015, filed 12/3/92, effective 1/3/93.] Repealed by 98-08-062 (Order 97-15), filed 3/30/98, effective 4/30/98. Statutory Authority: Chapter 90.54 RCW, WAC 173-563-090 and ESHB 1110 (1997).

WAC 173-563-010 Background and purpose. The Columbia River is an international as well as an interstate river with its waters subject to laws of seven western states, the Province of British Columbia, Canada and the federal governments of the United States and Canada. The flows and levels of the river are in a state of continuous change through the operation of numerous federally owned or federally licensed dams located within the river. The waters of the Columbia River are operated to support extensive irrigation development, inland navigation, municipal and industrial uses, and hydroelectric power development. Among all these uses, the anadromous fisheries of the Columbia River, which are dependent on clean flowing water, require for their survival the establishment of minimum flows of water and special actions by all agencies sharing in the management of the Columbia River.

The provisions of this chapter apply, as a matter of state law, to water right permits issued pursuant to the state's water rights code. The provisions hereof shall provide the department of ecology the basic state policy relating to minimum flows and levels for the Columbia River, for submission to various federal, interstate and state agencies having jurisdiction over the river. Further, the department of ecology of the state of Washington recognizes that, under our federal constitutional system, regulatory powers over the river are shared powers between the United States and the state of Washington and that by various federal actions the state's powers may, and in some cases have been superseded through the mandates of the Supremacy Clause of the United States Constitution.

This chapter is adopted under state legislation, to promote the proper utilization of the water resources of the Columbia River and to protect and insure the viability of the instream resource values associated with the main stem of the Columbia River in the future through (1) the establishment of minimum flows on the main stem Columbia River in Washington state, and (2) the establishment of conservation and efficiency fundamentals relating to out-of-stream and instream uses and values.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 80-08-021 (Order DE 80-2), § 173-563-010, filed 6/24/80.]

WAC 173-563-020 Applicability. (1) This chapter applies to public surface waters of the main stem Columbia River in Washington state and to any ground water the withdrawal of which is determined by the department of ecology to have a significant and direct impact on the surface waters of the main stem Columbia River.

The extent of the "main stem" Columbia River shall be the Columbia River from the upstream extent of tidal influence (Bonneville Dam-River Mile 146.1) upstream to the United States-Canada border (River Mile 745) and including those areas inundated by impounded waters at full pool elevations.

(2) Chapter 173-500 WAC, the general rules of the department of ecology for the implementation of the comprehensive water resources program mandated by RCW 90.54.-040, applies to this chapter.

(3) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, including existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir, or related facilities. This exemption includes rights embodied in all water right permits and certificates existing on the effective date of this chapter.

(4) The instream flows established and implemented by this chapter for instream and out-of-stream uses, and the average weekly flows applied by this chapter to out-of-stream uses do not apply to any application for water from the main stem Columbia River on which a decision is made by the department of ecology on or after July 27, 1997. Any water right application considered for approval or denial after that date will be evaluated for possible impacts on fish and existing water rights. The department will consult with appropriate local, state, and federal agencies and Indian tribes in making this evaluation. Any permit which is then approved for the use of such waters will be, if deemed necessary, subjected to instream flow protection or mitigation conditions determined on a case-by-case basis through the evaluation conducted with the agencies and tribes.

(5) Waters withdrawn by the United States pursuant to RCW 90.40.030 prior to the effective date of this rule relating to the second half of the Columbia basin project, and water right permits and certificates hereafter issued by the department of ecology pertaining to such withdrawn waters, are not subject to the provisions of this chapter.

(6) For the purposes of this chapter, average weekly flows shall be the average of the daily average flows reported in the Columbia River operational hydromet and management system (CROHMS) for a seven-day period beginning at 12:01 a.m. Monday and ending at midnight on Sunday. When the beginning of the seven-day period defined in this section does not correspond to the dates on which flows are established in WAC 173-563-040, the flow requirements for that week shall be the arithmetic average of the required flows listed in WAC 173-563-040 for each of the seven days, rounded to the nearest 1,000 cfs.

[Statutory Authority: Chapter 90.54 RCW, WAC 173-563-090 and ESHB 1110 (1997). 98-08-062 (Order 97-15), § 173-563-020, filed 3/30/98, effective 4/30/98. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-020, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-020, filed 6/24/80.]

WAC 173-563-030 Authority. These rules are adopted under the authority of chapters 90.54, 90.22, and 90.03 RCW, and in relation to chapter 173-500 WAC.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 80-08-021 (Order DE 80-2), § 173-563-030, filed 6/24/80.]

WAC 173-563-040 Establishment of instream flows for instream uses. (1) In order to protect the quality of the natural environment and provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values, minimum instantaneous flows and minimum average weekly flows are established for instream uses at the following project locations on the main stem Columbia River in Washington state:

CONTROL STATION	RIVER MILE	MANAGEMENT UNIT
The Dalles Dam	191.5	John Day Dam to Bonneville Dam (Lake Bonneville and Celilo Lake) (River Mile 146.1-215.6)
John Day Dam	215.6	John Day Dam to McNary Dam (Umatilla Lake) (River Mile 215.6-292.0)
McNary Dam	292.0	McNary Dam to Priest Rapids Dam (Lake Wallula and the Hanford Reach) (River Mile 292.0-397.1)
Priest Rapids Dam and upstream (Wanapum, Rock Island, Rocky Reach, Wells, Chief Joseph, and Grand Coulee Dam)	397.1+	Priest Rapids Dam upstream to Canadian Border (River Mile 397.1-745.0)

(2) Minimum instantaneous flows at the locations listed in WAC 173-563-040(1) are established for instream uses as follows:

MINIMUM INSTANTANEOUS FLOWS - COLUMBIA RIVER PROJECTS
(1,000 cubic feet/second)

		Chief* Joseph	Wells & Rocky Reach Rock Island & Wanapum*	Priest Rapids	McNary & John Day	The Dalles
Jan		10	10	50	20	20
Feb		10	10	50	20	20
Mar		10	10	50	50	50
Apr	1-15	20	20	50	50	70
	16-25	20	30	50	70	70
	26-30	20	50	50	70	70
May		20	50	50	70	70
June	1-15	20	50	50	70	70
	16-30	10	20	50	50	50
Jul	1-15	10	20	50	50	50
	16-31	10	50	50	50	50
Aug		10	50	50	50	50
Sep		10	20	36	50	50
Oct	1-15	10	20	36	50	50
	16-31	10	20	50	50	50
Nov		10	10	50	50	50
Dec		10	10	50	20	20

* As provided in WAC 173-563-050(1), the minimum instantaneous flows set forth in this subsection are subject to a reduction of up to twenty-five percent during low flow years, except that in no case shall the outflow from Priest Rapids Dam be less than 36,000 cfs. For the reach from Grand Coulee through Wanapum, minimum instantaneous flows shall be as shown above, or as necessary to maintain minimum flows (subject to low runoff adjustment) at Priest Rapids, whichever is higher.

(3) Minimum average weekly flows for instream uses are established at the locations listed in WAC 173-563-040(1) as follows:

MINIMUM AVERAGE WEEKLY FLOWS - COLUMBIA RIVER PROJECTS
(1,000 cubic feet/second)

		Chief Joseph*	Wells & Rocky Reach*	Rock Island & Wanapum*	Priest Rapids	McNary	John Day	The Dalles
Jan		30	30	30	70	60	60	60
Feb		30	30	30	70	60	60	60
Mar		30	30	30	70	60	60	60
Apr	1-15	50	50	60	70	100	100	120
	16-25	60	60	60	70	150	150	160
	26-30	90	100	110	110	200	200	200

		Chief Joseph*	Wells & Rocky Reach*	Rock Island & Wanapum*	Priest Rapids	McNary	John Day	The Dalles
May		100	115	130	130	220	220	220
Jun	1-15	80	110	110	110	200	200	200
	16-30	60	80	80	80	120	120	120
Jul	1-15	60	80	80	80	120	120	120
	16-31	90	100	110	110	140	140	140
Aug		85	90	95	95	120	120	120
Sep		40	40	40	40	60	85	90
Oct	1-15	30	35	40	40	60	85	90
	16-31	30	35	40	70	60	85	90
Nov		30	30	30	70	60	60	60
Dec		30	30	30	70	60	60	60

* For the reach from Grand Coulee through Wanapum, minimum average weekly flows shall be as shown above, or as necessary to maintain minimum flows (subject to low runoff adjustment) at Priest Rapids, whichever is higher. As provided in WAC 173-563-050(1), the minimum average weekly flows set forth in this subsection are subject to a reduction of up to twenty-five percent during low flow years, except that in no case shall the outflow from Priest Rapids Dam be less than 36,000 cfs.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-040, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-040, filed 6/24/80.]

WAC 173-563-050 Critical flow adjustment to, and waivers of, minimum instantaneous and average weekly flows. (1) The director of the department of ecology, when he deems it to be an overriding public interest requirement, may reduce the minimum instantaneous and/or average weekly flows for the Columbia River established in this chapter up to twenty-five percent during low flow years, except that in no case shall the outflow from Priest Rapids be less than 36,000 cfs. The amount of the reduction (from zero to twenty-five percent) shall be: (a) Based on the March 1 forecast for April through September runoff at The Dalles, Oregon, as published by the National Weather Service in Water Supply Outlook for the Western United States, and (b) determined from Figure 1 in WAC 173-563-900.

(2) Prior to implementing the critical flow adjustment to minimum flows in a low water year, the department of ecology shall conduct a public hearing to announce its intentions and to solicit public and agency comment on the proposed action.

(3) The department has determined that some damage to instream values may be incurred at flow values equivalent to eighty-eight million acre-feet or less. Therefore, the reduced flows shall be referred to as critical flows and shall be authorized by the director of the department of ecology under the critical flow adjustment only when the March 1 forecast of April through September flow at The Dalles is below eighty-eight million acre-feet (MAF). The critical flows shall, in no case, provide less than 39.4 MAF (seventy-five percent of 52.5 MAF for the April through September period).

(4) The director of the department of ecology may waive the state's minimum flow requirements delineated in this chapter for a defined period of time for the purpose of studying the impacts of various flow levels on the river system and its operation when such studies are to be conducted in consultation with the Washington departments of fisheries and/or wildlife and when said exemption is requested by the departments of fisheries and/or wildlife. Such a request shall be made by letter to the director of the department of ecology. This waiver may include the Federal Energy Regulatory Commission studies to be conducted under Docket No. E-9569 and any operational change which does not allow the flows under this chapter to be met, but which, in the opinion of the director, still provides a commensurate level of protection for instream resources.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-050, filed 6/9/88. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-050, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-050, filed 6/24/80.]

WAC 173-563-052 Establishment of instream flows for out-of-stream uses. In order to protect the quality of the natural environment and provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values, the minimum average weekly flows listed in WAC 173-563-040(3) are established for out-of-stream uses.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-052, filed 10/7/82 and 10/8/82.]

WAC 173-563-056 Application of minimum average weekly flows to out-of-stream uses. (1) For the first 4,500 cfs of water rights issued subject to this program, the following conditions shall apply:

(a) When the March 1 forecast of April-September runoff at The Dalles, Oregon (as published by the National Weather Service in Water Supply Outlook for the Western United States) is equal to or greater than 88 million acre-feet (MAF), no regulation of out-of-stream diverters shall occur, regardless of the gaged flow of the Columbia River.

(b) When the flow forecast is less than 88 MAF but greater than 60 MAF, the department shall encourage voluntary water conservation through appropriate notification of water users in an attempt to foster efficient resource use.

(c) When the flow forecast is 60 MAF or less, the department shall regulate out-of-stream diverters on the basis of first-in-time is first-in-right whenever it is predicted that gaged flows will fall below the minimum average weekly flows as established by this chapter.

(2) For any water allocations issued in excess of the first 4,500 cfs defined in WAC 173-563-056(1), the following conditions shall apply:

(a) When the March 1 forecast of April-September runoff at The Dalles, Oregon (as published by the National Weather Service in Water Supply Outlook for the Western United States) is equal to or greater than 88 million acre-feet (MAF), no regulation of out-of-stream diverters shall occur, regardless of the gaged flow of the Columbia River.

(b) When the flow forecast is less than 88 MAF, the department shall regulate out-of-stream diverters on the basis of first-in-time is first-in-right whenever it is predicted that gaged flows will fall below the CRIRPP minimum average weekly flows as established by this chapter.

(3) The department shall utilize the Bonneville Power Administration (BPA) 30-day power operation plan in predicting specific periods of anticipated flow conditions.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-056, filed 10/7/82 and 10/8/82.]

WAC 173-563-060 Establishment of conservation and efficiency fundamentals. (1) The department, having determined that public water is available from the main stem of the Columbia River in Washington and that continued issuance of water right permits and certificates therefrom is in the public interest, does acknowledge and is concerned that, cumulatively, the projected future diversions from the main stem Columbia River in Washington state may, under certain flow conditions, have a detrimental effect on instream values.

(2) Also, it is in the public interest that the state's water resources be conserved and that the burden of water shortages in low water years should be shared by the various users to the greatest extent practicable.

(3) Notwithstanding the constraints on prorata water-sharing under existing state water laws, the department shall, in projected low water years, utilize all reasonable measures of influence to achieve the goal of this section.

(4) During proof of appropriation of water under RCW 90.03.330 and before issuing a certificate of water right, the department shall assure that the quantities of water shown on the certificate accurately reflect the perfected usage consistent with up-to-date water conservation practices and water delivery system efficiencies.

(5) The department shall continue to seek effective methods to better achieve the goal of this section.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-060, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-060, filed 6/24/80.]

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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-070, filed 6/9/88. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 80-08-021 (Order DE 80-2), § 173-563-070, filed 6/24/80.]

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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-075, filed 6/9/88.]

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, stockwatering, 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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-080, filed 6/9/88. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-080, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-080, filed 6/24/80.]

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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-090, filed 6/9/88. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 80-08-021 (Order DE 80-2), § 173-563-090, filed 6/24/80.]

WAC 173-563-100 Implementation. (1) All water right permits and certificates subject to this chapter or issued subject to chapter 173-531A WAC shall be issued subject to the department's minimum flow requirements. (The minimum average weekly flows established in WAC 173-563-040 and 173-563-052 are equivalent to a flow of 52.5 MAF at The Dalles for the April through September period.)

(2) All water rights for instream uses subject to the minimum flows established in this chapter shall contain the following provision:

This permit/certificate is subject to the minimum flow provisions contained in chapter 173-563 WAC and is subject to regulation by the department of ecology to insure protection of instream resources.

(3) All water rights for out-of-stream uses subject to the flows established in this chapter shall contain the following provisions:

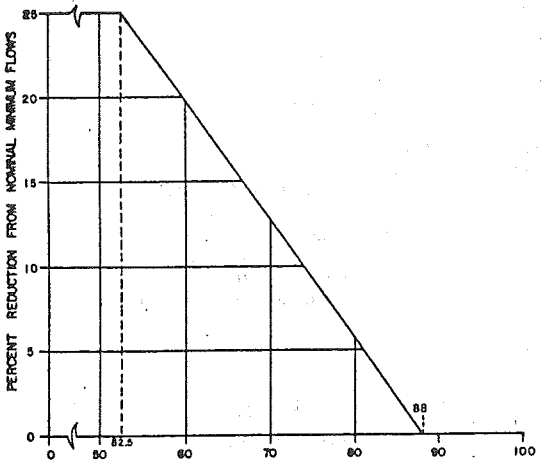
(a) This permit/certificate is subject to the minimum flow provisions contained in chapter 173-563 WAC and is subject to regulation by the department of ecology to insure protection of instream resources.

(b) Use of water under this authorization shall be contingent upon the water right holder's utilization of up to date water conservation practices and maintenance of efficient water delivery systems consistent with established regulation requirements and facility capabilities.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-100, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-100, filed 6/24/80.]

WAC 173-563-900 Critical flow adjustment—Minimum instantaneous and weekly average flows—Columbia River.

FIGURE 1
CRITICAL FLOW ADJUSTMENT MINIMUM INSTANTANEOUS AND WEEKLY AVERAGE FLOWS COLUMBIA RIVER



[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-900, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-900, filed 6/24/80.]

Chapter 173-564 WAC

WATER RESOURCES MANAGEMENT PROGRAM FOR THE MAIN STEM OF THE SNAKE RIVER IN WASHINGTON STATE

WAC

WAC 173-564-010 Background and purpose. The Snake River is an interstate river with waters subject to laws of five states and the federal government. The flows and levels of the river in Washington state are heavily influenced by the operation of federally owned and federally licensed dams located upstream from Washington and within Washington, as well as by water diversions in the various states. The waters of the river support extensive irrigation, navigation, municipal, industrial, and power generation uses as well as nationally significant anadromous fish runs. These fish runs require for their survival clean, flowing water assured by minimum flows and special actions by all agencies sharing in the management of the river.

The department of ecology of the state of Washington recognizes that, under our federal constitutional system, regulatory power over the Snake River is shared between the United States and the states and that by various federal actions the state's powers may in some cases be superseded through the mandates of the Supremacy Clause of the United States Constitution.

This chapter is adopted to promote the proper utilization of the water resources of the Snake River and to protect and insure the viability of the instream resource values associated with the main stem of the river in the future.

[Statutory Authority: Chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW and Chapter 173-500 WAC. 93-01-010 (Order 92-21), § 173-564-010, filed 12/3/92, effective 1/3/93.]

WAC 173-564-020 Authority. These rules are adopted under the authority of chapters 34.05, 43.21A, 43.27A, 90.03, 90.44, and 90.54 RCW, and in relation to chapter 173-500 WAC.

[Statutory Authority: Chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW and Chapter 173-500 WAC. 93-01-010 (Order 92-21), § 173-564-020, filed 12/3/92, effective 1/3/93.]

WAC 173-564-030 Applicability. (1) This chapter applies to public surface waters of the main stem of the Snake River in Washington and to any ground water where the ground water is determined by the department of ecology to be part of or tributary to the surface waters of the main stem of the Snake River. For purposes of this chapter, the main stem of the Snake River extends from the Idaho, Oregon and Washington border, in the extreme southeastern corner of the state of Washington, at river mile 175, to the confluence with the Columbia River near Pasco, Washington at river mile 0.

(2) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, including existing water right permits and certificates.

[Statutory Authority: Chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW and Chapter 173-500 WAC. 93-01-010 (Order 92-21), § 173-564-030, filed 12/3/92, effective 1/3/93.]

WAC 173-564-040 Withdrawal of unappropriated waters. (1) The National Marine Fisheries Service (NMFS) listed Snake River sockeye salmon as endangered under the federal Endangered Species Act on December 20, 1991. NMFS listed Snake River spring/summer and fall chinook salmon as threatened under the act on May 17, 1992. Since then, new information and changing conditions continue to place into question whether sufficient information and data is available for making sound decisions on water availability and the public interest for additional appropriations from the main stem of the Snake River. In response to the petitions for listing, the Northwest governors directed the regional Northwest Power Planning Council to develop a plan for the recovery of the petitioned species and other weak fish stocks in the Columbia Basin, including the Snake River. In late 1992 the council finalized its strategy for salmon, which cautioned the states against continuing to allow new appropriations at the same time that there is a regional effort to acquire additional flows for imperiled fish stocks. This regional effort has greatly intensified as a result of additional petitions for Endangered Species Act listings in the basin, consecutive dry years and a 1994 federal court decision that the hydroelectric system operations plan approved by NMFS and the federal operating agencies was not adequate.

(2) Pursuant to subsection (1) of this section, the waters of the main stem of the Snake River that are unappropriated by water rights for which applications were accepted for filing by the department prior to December 20, 1991, are with-

drawn from further appropriation, except that the department may issue a permit to withdraw water for:

(a) Nonrecurring temporary projects for up to six months duration, with a possible extension of no more than six additional months (applications for extensions must include adequate justification for the extension and must demonstrate that reasonable efforts are being made to use the water for the project as efficiently as possible);

(b) Nonconsumptive uses which, for the purposes of this section, are defined as uses where:

(i) There is no diversion from the water source; or

(ii) The water is diverted and returned immediately to the source at the point of diversion following its use, in the same quantity as diverted and with no degradation in water quality;

(c) Uses which are necessary for emergency public health and safety needs, when all other reasonable methods of obtaining water (e.g., conservation, efficiencies, etc.) have been exhausted; and

(d) Uses which are specifically intended to benefit weak fish stocks.

(3) All water right applications which the department accepted for filing prior to December 20, 1991, for diversion or pumping of surface water from the main stem of the Snake River, or for withdrawal of ground water which is part of the main stem of the Snake River, shall be processed in accordance with existing policies and procedures and are not subject to this withdrawal of waters.

(4) With the exceptions specified in subsection (2) of this section, all water right applications which the department accepted or accepts for filing on or after December 20, 1991, which would result in the diversion or pumping of surface water from the main stem of the Snake River, regardless of the point of diversion specified in the water right application, are subject to this withdrawal of waters. These applications will be acted upon, without loss of priority date, after the expiration of the withdrawal of waters.

(5) With the exceptions specified in subsection (2) of this section, all water right applications which the department accepted or accepts for filing on or after December 20, 1991, which require a permit under RCW 90.44.050 and would result in the withdrawal of ground water which is in direct hydraulic continuity with the main stem of the Snake River are subject to this withdrawal of waters. All applications will be evaluated on a case-by-case basis. Applications determined to be subject to the withdrawal will be acted upon, without loss of priority date, after the expiration of the withdrawal of waters.

(6) This section will expire on July 1, 1999, or upon adoption by the department of ecology of a new instream resources protection program for the main stem Snake River, whichever shall occur first. The instream resources protection program shall be established in accordance with chapter 173-500 WAC (Water resources management program).

[Statutory Authority: Chapter 173-500 WAC, chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW. 95-02-066 (Order 94-18), § 173-564-040, filed 1/3/95, effective 2/3/95; 93-01-010 (Order 92-21), § 173-564-040, filed 12/3/92, effective 1/3/93.]

Chapter 173-590 WAC

PROCEDURES RELATING TO THE RESERVATION OF WATER FOR FUTURE PUBLIC WATER SUPPLY

WAC

WAC 173-590-010 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, the act provides direction to the department of ecology and other state agencies and officials in carrying out water and related resource programs.

(2) The act directs the department to develop and implement a water resources program which will provide a process for making decisions on future water resource allocation and use.

(3) The program may be developed in regional segments so that immediate attention may be given to waters of a given physioeconomic region of the state or to specific critical problems of water allocation and use.

(4) Preservation and protection of water in a potable condition for adequate and safe supplies to satisfy human domestic needs is one of the fundamentals of state water resource policy set forth in said act.

(5) The act further directs 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.

(6) Allocation of waters among potential uses and users shall be based generally on the securing of the maximum net benefits for the people of the state. Maximum net benefits shall constitute total benefits less cost including opportunity lost.

[Order DE 75-32, § 173-590-010, filed 3/11/76 and 3/10/76.]

WAC 173-590-020 Purpose. The purpose of this chapter is to establish and set forth a procedure whereby any person within the state of Washington may petition the department to reserve water for future public water supply.

[Order DE 75-32, § 173-590-020, filed 3/10/76.]

WAC 173-590-030 Authority. This regulation is adopted pursuant to the Water Resources Act of 1971, chapter 90.54 RCW.

[Order DE 75-32, § 173-590-030, filed 3/10/76.]

WAC 173-590-040 General. (1) These rules shall apply to both surface and ground waters of the state.

(2) Because of changing future conditions, including institutional arrangements, reservations under this chapter will be for specific geographic areas rather than for particular water suppliers.

(3) Appropriation of reserved water shall be in accordance with the intent and procedures set forth in chapters 90.03 and 90.44 RCW and adopted water resources programs under chapters 173-500 through 173-562 WAC applicable to the geographic area specified in a water right application.

(4) Regulations reserving waters for public water supply shall, where appropriate, provide guidelines for an interim use of the reserved waters for other beneficial uses.

[Order DE 75-32, § 173-590-040, filed 3/10/76.]

WAC 173-590-050 Definitions. For the purpose of this chapter and subsequent regulations, the following definitions shall be used:

(1) "Community water use" means use of water associated with needs of a community including street cleaning, parks, public buildings, public swimming pools, fire fighting, and attendant commercial, industrial and irrigational uses.

(2) "Director" means the director of the state of Washington department of ecology or his authorized representative.

(3) "Department" means the department of ecology unless specified otherwise.

(4) "Domestic water use" means use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, irrigation of not over one-half acre of lawn or garden per dwelling, and other incidental household uses.

(5) "Commercial and/or industrial use" means use of water associated with commercial and/or industrial requirements such as service, processing, cooling and conveying.

(6) "Public water supply" means any water supply intended or used for human consumption and community uses for more than one single-family residence.

(7) "Public water supply system" means a set of facilities including source, treatment, storage, transmission and distribution facilities whereby water is furnished to any municipality, community, collection, or number of individuals for human consumption and community uses.

(8) "Coordinated water system plan" means a plan adopted by utilities covering one or more public water supply system(s), which identifies present and future needs of participating water systems and sets forth means for meeting those needs in the most efficient manner possible. In areas where more than one water system lie in close proximity, a coordinated water system plan may consist of either of the following:

(a) A compilation of current and compatible water system plans developed by each utility containing the elements of comprehensive plan as set forth in WAC 248-54-280, with the addition of future service area designations, assessment of the feasibility of shared source, transmission, and storage facilities, and other mutual or regional concerns.

(b) An area wide water system plan developed jointly or by a lead agency which adequately addresses all the items mentioned in (a) above.

(9) "Reservation" means an allocation of water for a future beneficial use with the priority established as of the date when the reservation becomes effective.

(10) "Appropriation" means the process of legally acquiring the right to specific amounts of the public water resource for application to beneficial uses pursuant to RCW 90.03.250 through 90.03.340 and 90.44.060.

(11) "Person" means any individual, municipal, public, or private corporation, or other entity however dominated, including a state agency or county who operates a public water supply system or who contemplates such an operation.

[Order DE 75-32, § 173-590-050, filed 3/10/76.]

WAC 173-590-060 Reservation procedure—Petition for reservation. Any person, hereafter desiring the department to reserve water for future public water supply may file a petition with the director requesting future establishment of a reservation, provided that the applicant shall have a coordinated water system plan approved by the secretary, department of social and health services unless exempted from this requirement by both the secretary and the director.

[Order DE 75-32, § 173-590-060, filed 3/10/76.]

WAC 173-590-070 Contents of petition. Each petition to the director for the reservation of water shall include, but not be limited to, the following:

(1) Name and post office address of the applicant.

(2) Source of water supply.

(3) Map showing the proposed general service area, source of supply, pipelines, distribution systems, wells and other appurtenant works.

(4) Present and projected population in 10, 25, and 50 years.

(5) The amount of the present and proposed use in the following categories, and the time during which water will be required each year if the requirements differ seasonally:

(a) Domestic water use;

(b) Community water uses including specific amounts for attendant commercial, industrial and irrigational uses;

(c) Other(s) as specified.

(6) Copy of a coordinated water system plan, or comprehensive plan under WAC 248-54-280 if water systems are sufficiently separated so that no advantages will be realized by coordination. All review comments from the local A-95 clearinghouse on said plan shall be provided.

(7) Information to justify the requested reservation quantity in the form of official state population estimates, regional plan or engineering reports.

(8) A summary of ongoing and planned conservation programs. When applicable, this must summarize water usage for the previous five years including total water diverted or withdrawn, total water sold, and the quantities used by residential, wholesale and large industrial users. Status of metering of all services must be described. Rate structures should not encourage waste of the water resources and should be described.

(9) Other data as may be required by the director.

[Order DE 75-32, § 173-590-070, filed 3/10/76.]

WAC 173-590-080 Record of petition. The department shall maintain a file of all petitions for reservation of water under the provisions of this chapter. If a petition is returned to the petitioner for completion or correction, the date and the reasons for the return thereof shall be endorsed and shall be recorded in the reservation file.

[Order DE 75-32, § 173-590-080, filed 3/10/76.]

WAC 173-590-090 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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-090, filed 6/9/88; Order DE 75-32, § 173-590-090, filed 3/10/76.]

WAC 173-590-100 Investigation. When a petition is received, the director shall conduct an investigation of the surrounding impacts of the proposed reservation.

[Order DE 75-32, § 173-590-100, filed 3/10/76.]

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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-110, filed 6/9/88; Order DE 75-32, § 173-590-110, filed 3/10/76.]

WAC 173-590-120 Compatibility with existing water resources program. Reservation of waters pursuant to this chapter and other elements of a comprehensive water resources program developed pursuant to chapters 173-500 through 173-562 WAC and amendments thereof shall be compatible.

[Order DE 75-32, § 173-590-120, filed 3/10/76.]

WAC 173-590-130 Separate reservation by use. In situations where a given area will require significant quantities of water for other than community and domestic water uses, the reservation may identify separate quantities for each use.

[Order DE 75-32, § 173-590-130, filed 3/10/76.]

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.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-140, filed 6/9/88; Order DE 75-32, § 173-590-140, filed 3/10/76.]

WAC 173-590-150 Effective date of reservation. The effective date of a reservation established under the provisions of this chapter shall be the date when a regulation pertaining to a specific reservation has been adopted: Provided, That the effective date for any additional amount of reservation pursuant to the provisions of WAC 173-590-140 shall be the date when such subsequent amendments become effective.

[Order DE 75-32, § 173-590-150, filed 3/10/76.]

WAC 173-590-160 Application for water rights. With regard to any permit issued pursuant to RCW 90.03.290 and 90.44.060 which authorizes withdrawal and use of waters subject of a regulation provided for in WAC 173-590-110 hereof, the priority date of said permit shall be the effective date of said regulation.

[Order DE 75-32, § 173-590-160, filed 3/10/76.]

WAC 173-590-170 Reservation without petition—Hearings. Whenever it appears necessary, the director may reserve and set aside waters for beneficial utilization in the future on his own motion as provided under RCW 90.54.050(1). In so doing, prior to the adoption of such rule, the director shall conduct a public hearing in each county in which waters relating to such rule are located.

[Order DE 75-32, § 173-590-170, filed 3/10/76.]

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.

[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

WAC 173-591-010 Purpose. The purpose of this chapter is to reserve ground waters within Thurston County for future public water supply.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-010, filed 7/14/86.]

WAC 173-591-020 Authority. This regulation is adopted pursuant to the Water Resources Act of 1971, chapter 90.54 RCW and chapter 173-590 WAC.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-020, filed 7/14/86.]

WAC 173-591-030 General. (1) These rules shall apply to ground waters in Thurston County, as defined in WAC 173-591-040 and 173-591-070(4), as specified in Figure II-2 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 ground waters for future public supply, and as shown as the reservation source of supply subareas on the Thurston County reservation source of supply subarea boundary map in WAC 173-591-130, Illus. 2.

(2) The reservation adopted under this chapter will be for the specific geographical area so named the "reservation boundaries" as shown in Figure II-1 of the coordinated water supply plan for Thurston County, dated May 1982, as approved by the department of social and health services for the purposes of reserving ground waters for future public water supply, and shown on the Thurston County reservation area boundary map in WAC 173-591-130, Illus. 1.

(3) Appropriation of reserved waters under this chapter shall be in accordance with the intent and procedures set forth in chapters 90.03 and 90.44 RCW and chapter 173-513 WAC Instream resources protection program—Deschutes River Basin, Water Resource Inventory Area (WRIA) 13 (adopted 6/24/80) and chapter 173-511 WAC Instream resources protection program—Nisqually River Basin, Water Resource Inventory Area (WRIA) 11 (adopted 2/2/81) and chapter 173-514 WAC Instream resources protection program—Kennedy-Goldsborough Water Resource Inventory Area (WRIA 14) (adopted 1/23/84).

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-030, filed 7/14/86.]

WAC 173-591-040 Reservation area defined. "Thurston County reservation area" and "Thurston County reservation source of supply area" shall mean those lands lying within Thurston County described as follows:

Location	Township	Range	Sections
Reservation Area	16N	3W	1-3, 10-12
	16N	2W	1-12
	16N	1W	4-9
	17N	3W	1, 2, 3 (portion), 10-15, 22-27, 34-36
	17N	2W	1-36
	17N	1W	1-21, 27 (portion), 28-33
	17N	1E	6, 7, portions of 3, 8, 18
	18N	3W	1-4, 9-16, 21 (portion), 22 (portion), 23-25, 36
	18N	1W	1-36
	18N	1E	6, 7, 17-20, 29-32, portions of 5, 8, 16, 28
	19N	3W	12, 13, 23-28, 33-36, (portions in Thurston County)
	19N	2W	portion in Thurston County
	19N	1W	portion in Thurston County
	19N	1E	portion in Thurston County
Reservation Source of Supply Area			
Airport	17N	2W	3, 10-15, 22-24 & portions of 9, 16, 21 east of Interstate 5
	18N	2W	34
Allison Springs	18N	2W	18
Black Lake	17N	2W	4-8, 17-20, 29-31 & portions of 9, 16, 21, 18 & 33 west of Interstate 5
	18N	2W	31-33
Deschutes Valley	17N	2W	12
	18N	2W	25, 26, 35, 36
Hawks Prairie	18N	1W	1-8 & portions of 9-12 north of Interstate 5
	19N	1W	25-36
	18N	1E	portion of 6 west of Nisqually River
	19N	1E	portions of 30 & 31 west of Nisqually River
McAllister Springs	18N	1E	19
Mottman Industrial Park	18N	2W	27-29
Southeast	17N	1W	2-11, 14-23
	18N	1W	19-21, 28-34

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-040, filed 7/14/86.]

WAC 173-591-050 Definitions. For the purpose of this chapter the following definitions shall be used:

(1) "Community water use" means use of water associated with needs of a community including street cleaning, parks, public buildings, public swimming pools, fire fighting, and attendant commercial, industrial and irrigation uses.

(2) "Director" means the director of the state of Washington department of ecology or the director's authorized representative.

(3) "Department" means the department of ecology unless otherwise specified.

(4) "Domestic water use" means use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, irrigation of not over one-half acre of lawn or garden per dwelling, and other incidental household uses.

(5) "Commercial and/or industrial use" means use of water associated with commercial and/or industrial requirements such as service, processing, cooling and conveying.

(6) "Public water supply" means any water supply intended or used for human consumption and community uses for more than one single-family residence.

(7) "Public water supply system" means a set of facilities including source, treatment, storage, transmission and distribution facilities whereby water is furnished to any municipality, community, collection, or number of individuals for human consumption and community uses.

(8) "Coordinated water system plan" means a plan adopted by utilities covering one or more public water supply system(s), which identifies present and future needs of participating water systems and sets forth means for meeting those needs in the most efficient manner possible.

(9) "Reservation" means an allocation of water for a future beneficial use with the priority established as of the date when the reservation becomes effective.

(10) "Appropriation" means the process of legally acquiring the right to specific amounts of the public water resource for application to beneficial uses pursuant to RCW 90.03.250 through 90.03.340 and 90.44.060.

(11) "Person" means any individual, municipal, public, or private corporation, or other entity, including a federal or state agency or county which operates a public water supply system or who contemplates such an operation.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-050, filed 7/14/86.]

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.

Source Location	Reservation Quantities Instantaneous (GPM)	Annual (Af/Yr)
Airport	2,500	1,486
Allison Springs	2,000	1,888
Black Lake	2,000	1,888
Deschutes Valley	1,969	1,170
Hawks Prairie	7,000	4,160
McAllister Springs	2,000	——
Mottman Indust. Park	2,000	1,888
Southeast	14,426	8,573
Total	40,589	22,931

(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 subsec-

tion (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.]

WAC 173-591-080 Future nonpublic water supply—Policy uses. If applications are made for the use of the ground water reserved in WAC 173-591-070(2) for purposes other than public water supplies, as defined in WAC 173-591-050 (6) and (7), the director may issue a permit allowing such uses but these uses shall be junior in priority to all rights issued pursuant to WAC 173-591-070. Interim uses authorized in this section may be reduced or curtailed in right when necessary to allow to full utilization of higher priority rights established in WAC 173-591-070. The department may limit or otherwise condition junior water rights permits as necessary to ensure availability of the reserved ground waters for public water supply purposes consistent with this chapter.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-080, filed 7/14/86.]

WAC 173-591-090 Monitoring program. (1) The department, in cooperation with local government agencies, shall implement a comprehensive monitoring program, the purpose of which is to maintain accurate information on the quality and quantity of ground water reserved in WAC 173-591-070(2).

(2) Under this monitoring program surface and ground water levels will be periodically recorded as well as the levels of any lakes that are maintained by ground waters.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-090, filed 7/14/86.]

WAC 173-591-100 Water quality. As a general rule, an element of a ground water right is the right to use waters of quality appropriate to the beneficial use. In addition to the protection of the availability of ground water to the water withdrawal facilities of ground water right holders, it shall be the policy of the department to protect the quality of the ground waters of the state and in relation thereto to discourage any withdrawal facilities, construction methods, water use, or disposal practices which would contaminate or otherwise reduce the quality of the ground waters or impair the beneficial uses of ground waters of the state. Local governments with land use authority are urged to exercise their authorities in such a manner as to protect the quality of the public ground waters reserved for future public water supply by this chapter.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-100, filed 7/14/86.]

WAC 173-591-110 Exemptions. Wells for single family domestic, stock watering, or other purposes for which the withdrawal is less than 5,000 gallons per day, with priority dates subsequent to the effective date of this regulation, shall be junior to rights issued pursuant to WAC 173-591-070. The quantities of water withdrawn by such wells will not be subtracted from the waters reserved by this regulation.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-110, filed 7/14/86.]

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.

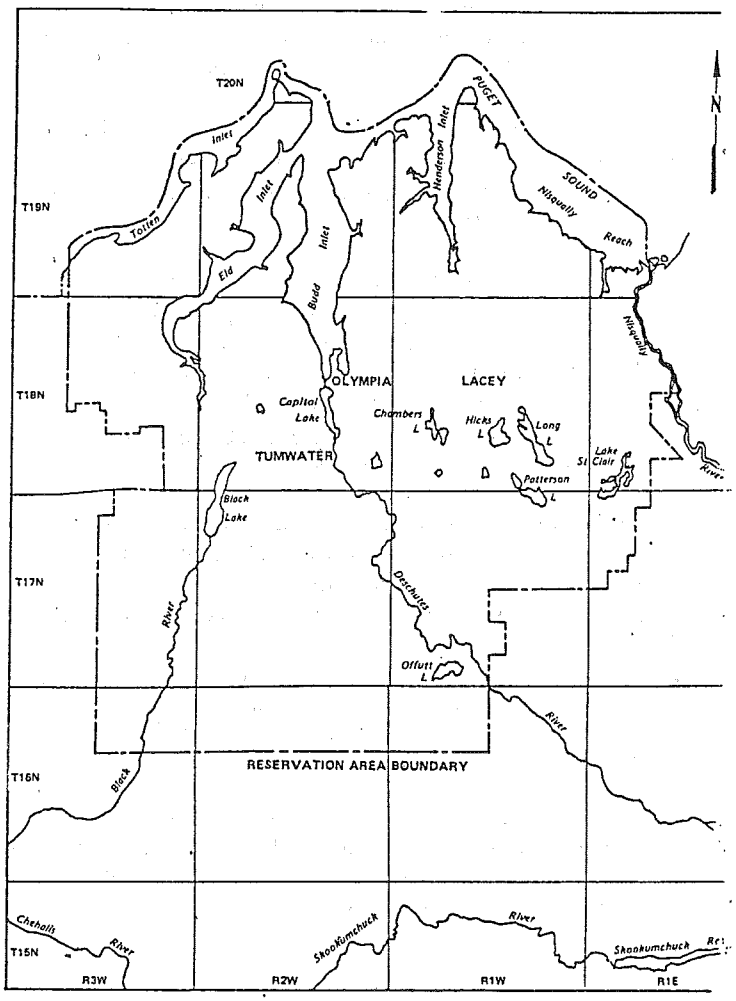
[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-591-115, filed 6/9/88.]

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.]

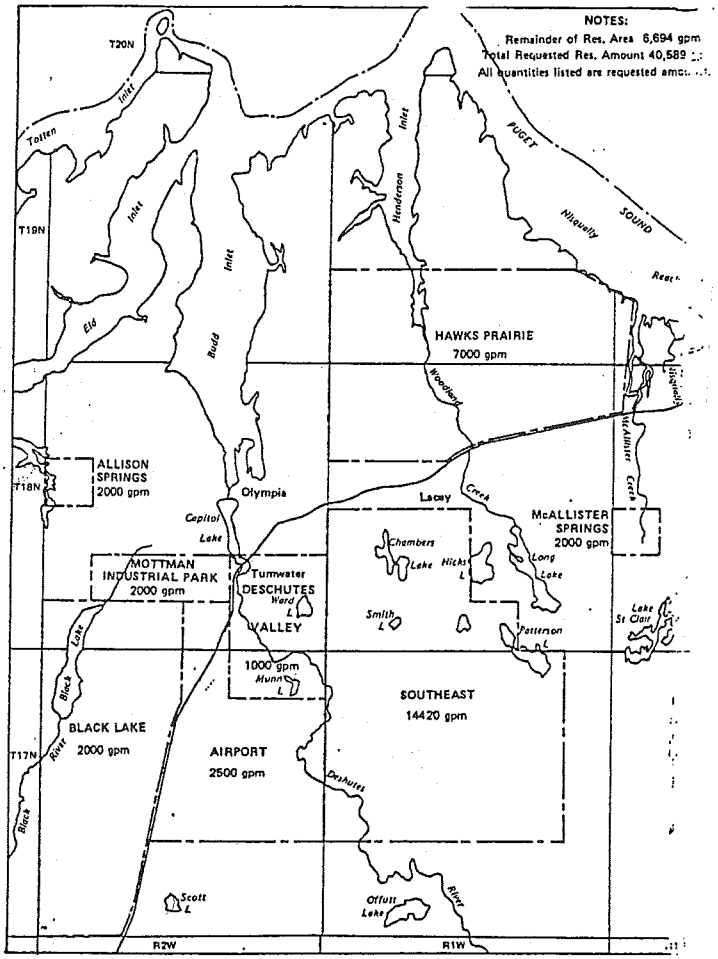
WAC 173-591-130 Reservation boundary maps. Thurston County reservation area and reservation source of supply subareas shall include those lands that lie within the heavy outline on the following maps:

THURSTON COUNTY RESERVATION AREA BOUNDARY MAP



THURSTON COUNTY RESERVATION AREA BOUNDARY MAP
WAC 173-591-130
ILLUSTRATION 1

THURSTON COUNTY RESERVATION SOURCE OF SUPPLY SUB-AREAS BOUNDARY MAP



THURSTON COUNTY RESERVATION SOURCE OF SUPPLY SUBAREAS BOUNDARY MAP
WAC 173-591-130
ILLUSTRATION 2

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-130, filed 7/14/86.]

Chapter 173-592 WAC
RESERVATION OF FUTURE PUBLIC WATER SUPPLY FOR CLARK COUNTY

WAC

WAC 173-592-010 Purpose. The purpose of this chapter is to reserve ground waters within Clark County for future public water supply.

[Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-010, filed 7/14/86.]

WAC 173-592-020 Authority. This regulation is adopted pursuant to the Water Resources Act of 1971, chapter 90.54 RCW and chapter 173-590 WAC.

[Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-020, filed 7/14/86.]

WAC 173-592-030 General. (1) These rules shall apply to ground waters in Clark County, as defined in WAC 173-592-040 and 173-592-070(5) as specified in the coordinated water system plan for Clark County, dated March, 1983, and approved by the department of social and health services for the purposes of reserving ground waters for future public supply. The location of the reserved waters is further defined in Attachment 1A of the revised petition requesting reservation of ground waters for future public water supply purposes, dated August 12, 1985, and shown on the reservation source of supply area boundary map in WAC 173-592-120, Illus. 1.

(2) Appropriation of reserved waters under this chapter shall be in accordance with the intent and procedures set forth in chapters 90.03 and 90.44 RCW.

[Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-030, filed 7/14/86.]

WAC 173-592-040 Reservation source of supply area defined. "Clark County reservation source of supply area" shall mean those lands lying within Clark County described as follows:

Township	Range	Sections
2N	1W	1, 2, 11, 12, 13, 24
3N	1W	1, 2, 12, 13, 24, 25, 36
4N	1W	1, 2, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 35, 36
5N	1W	36
2N	1E	1-29, 34-36
3N	1E	1-36
4N	1E	1-36
5N	1E	31-36
1N	2E	1-5, 11, 12
2N	2E	1-36
3N	2E	1-36
4N	2E	1-36
5N	2E	31-36
1N	3E	1-17
2N	3E	1-36
3N	3E	1-36
4N	3E	1-36
5N	3E	31-36
1N	4E	1-18, 20-24
2N	4E	6, 7, 18, 19, 25-36
3N	4E	6, 7, 18, 19, 30, 31
4N	4E	6, 7, 18, 19, 30, 31
5N	4E	31

[Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-040, filed 7/14/86.]

WAC 173-592-050 Definitions. For the purpose of this chapter the following definitions shall be used:

(1) "Community water use" means use of water associated with needs of a community including street cleaning, parks, public buildings, public swimming pools, fire fighting, and attendant commercial, industrial, and irrigation uses.

(2) "Director" means the director of the state of Washington department of ecology or the director's authorized representative.

(3) "Department" means the department of ecology unless otherwise specified.

(4) "Domestic water use" means use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, irrigation of not over one-half acre of lawn or garden per dwelling, and other incidental household uses.

(5) "Commercial and/or industrial use" means use of water associated with commercial and/or industrial requirements such as service, processing, cooling, and conveying.

(6) "Public water supply" means any water supply intended or used for human consumption and community uses for more than one single-family residence.

(7) "Public water supply system" means a set of facilities including source, treatment, storage, transmission, and distribution facilities whereby water is furnished to any municipality, community, collection, or number of individuals for human consumption and community uses.

(8) "Coordinated water system plan" means a plan developed by utilities and adopted by Clark County and approved by the department of social and health services covering one or more public water supply system(s), which identifies present and future needs of participating water systems and sets forth means for meeting those needs in the most efficient manner possible.

(9) "Reservation" means an allocation of water for a future beneficial use with the priority established as of the date when the reservation becomes effective.

(10) "Appropriation" means the process of legally acquiring the right to specific amounts of the public water resource for application to beneficial uses pursuant to RCW 90.03.250 through 90.03.340 and 90.44.060.

(11) "Person" means any individual, municipal, public, or private corporation, or other entity, including a federal or state agency or county which operates a public water supply system or who contemplates such an operation.

[Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-050, filed 7/14/86.]

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 reserva-

tion 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:

1A Columbia River Alluvium
1B-2B Upper Troutdale
1C 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 173-592-080 Monitoring program. (1) The department, in cooperation with local government agencies, shall implement a comprehensive monitoring program, the purpose of which is to maintain accurate information on the quality and quantity of ground water reserved in WAC 173-592-070(2).

(2) Under this monitoring program surface and ground water levels will be periodically recorded as well as the levels of any lakes that are maintained by ground waters.

[Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-080, filed 7/14/86.]

WAC 173-592-090 Water quality. As a general rule, an element of a ground water right is the right to use waters of quality appropriate to the beneficial use. In addition to the protection of the availability of ground water to the water withdrawal facilities of ground water right holders, it shall be the policy of the department to protect the quality of the ground waters of the state and in relation thereto to discourage any withdrawal facilities, construction methods, water use, or disposal practices which would contaminate or otherwise reduce the quality of the ground waters or impair the beneficial uses of ground waters of the state. Local governments with land use authority shall be urged to exercise their authorities in such a manner as to protect the quality of the public ground waters reserved for future public water supply by this chapter.

[Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-090, filed 7/14/86.]

WAC 173-592-100 Exemptions. Wells for single family domestic, stock watering, or other purposes, for which the withdrawal is less than 5,000 gallons per day, with priority dates subsequent to the effective date of this regulation, shall be junior to it, and the quantities of water withdrawn by exempted wells will not be subtracted from the waters reserved by this regulation.

[Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-100, 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.

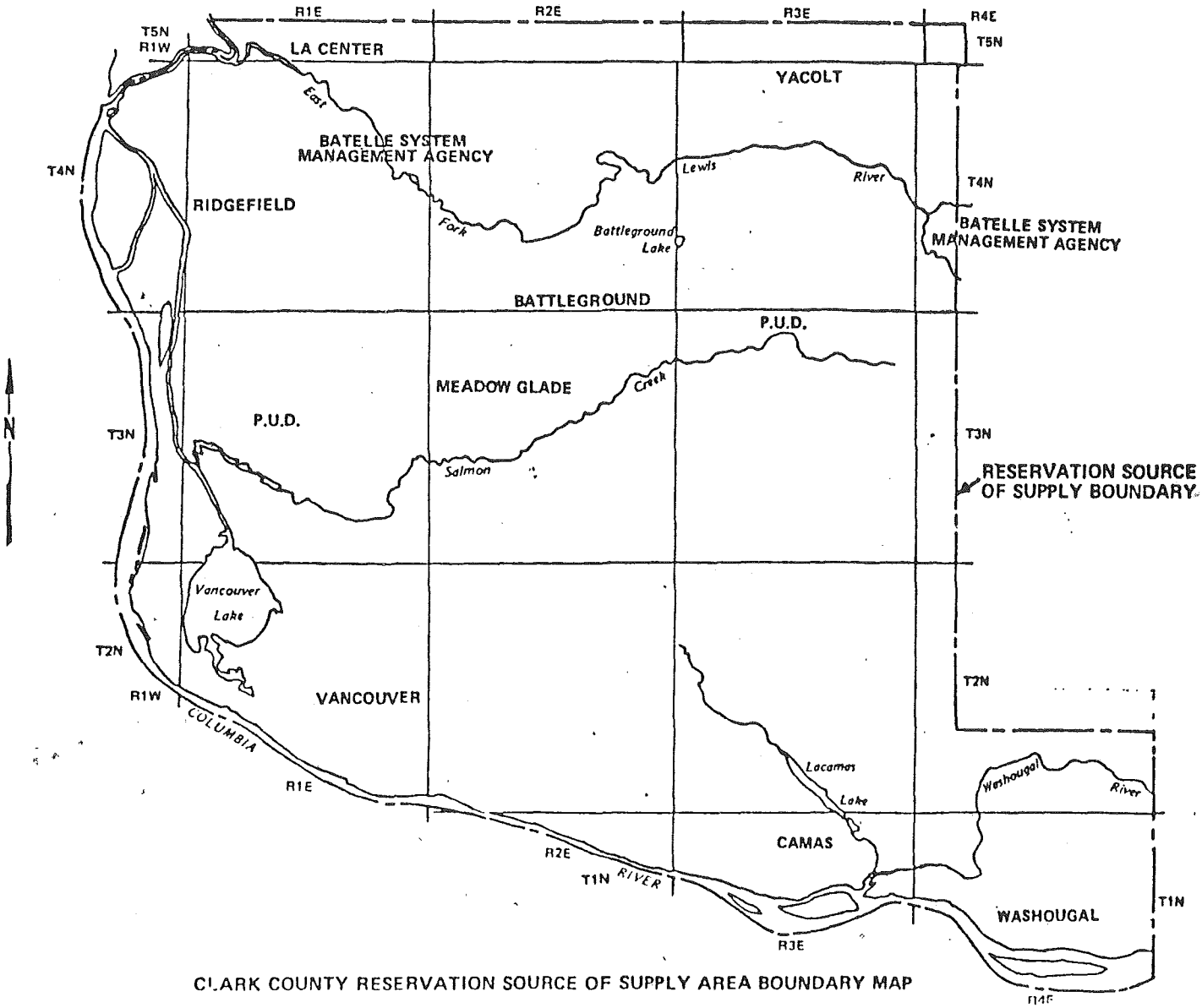
[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-592-110, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-110, filed 7/14/86.]

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.]

WAC 173-592-120 Reservation source of supply area map. Clark County reservation source of supply area shall include those lands that lie with the heavy outline on the following map:

CLARK COUNTY RESERVATION SOURCE OF SUPPLY AREA BOUNDARY MAP



CLARK COUNTY RESERVATION SOURCE OF SUPPLY AREA BOUNDARY MAP

[Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-120, filed 7/14/86.]

Chapter 173-802 WAC
SEPA PROCEDURES

WAC

WAC 173-802-010 Authority. These rules are promulgated under RCW 43.21C.120 (the State Environmental Policy Act) and chapter 197-11 WAC (SEPA rules).

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-010, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-020 Adoption by reference. The department of ecology adopts the following sections or subsections of chapter 197-11 WAC by reference.

197-11-040	Definitions.
197-11-050	Lead agency.
197-11-055	Timing of the SEPA process.
197-11-060	Content of environmental review.
197-11-070	Limitations on actions during SEPA process.
197-11-080	Incomplete or unavailable information.
197-11-090	Supporting documents.
197-11-100	Information required of applicants.
197-11-300	Purpose of this part.
197-11-305	Categorical exemptions.
197-11-310	Threshold determination required.
197-11-315	Environmental checklist.
197-11-330	Threshold determination process.
197-11-335	Additional information.
197-11-340	Determination of nonsignificance (DNS).
197-11-350	Mitigated DNS.
197-11-360	Determination of significance (DS)/initiation of scoping.
197-11-390	Effect of threshold determination.
197-11-400	Purpose of EIS.
197-11-402	General requirements.
197-11-405	EIS types.
197-11-406	EIS timing.
197-11-408	Scoping.
197-11-410	Expanded scoping. (Optional)
197-11-420	EIS preparation.
197-11-425	Style and size.
197-11-430	Format.
197-11-435	Cover letter or memo.
197-11-440	EIS contents.
197-11-442	Contents of EIS on nonproject proposals.
197-11-443	EIS contents when prior nonproject EIS.
197-11-444	Elements of the environment.
197-11-448	Relationship of EIS to other considerations.
197-11-450	Cost-benefit analysis.
197-11-455	Issuance of DEIS.
197-11-460	Issuance of FEIS.
197-11-500	Purpose of this part.
197-11-502	Inviting comment.
197-11-504	Availability and cost of environmental documents.
197-11-508	SEPA register.
197-11-535	Public hearings and meetings.
197-11-545	Effect of no comment.
197-11-550	Specificity of comments.
197-11-560	FEIS response to comments.
197-11-570	Consulted agency costs to assist lead agency.
197-11-600	When to use existing environmental documents.
197-11-610	Use of NEPA documents.
197-11-620	Supplemental environmental impact statement—Procedures.
197-11-625	Addenda—Procedures.
197-11-630	Adoption—Procedures.
197-11-635	Incorporation by reference—Procedures.
197-11-640	Combining documents.
197-11-650	Purpose of this part.
197-11-655	Implementation.
197-11-660	Substantive authority and mitigation.
197-11-680	Appeals.
197-11-700	Definitions.
197-11-702	Act.
197-11-704	Action.
197-11-706	Addendum.
197-11-708	Adoption.
197-11-710	Affected tribe.
197-11-712	Affecting.
197-11-714	Agency.
197-11-716	Applicant.
197-11-718	Built environment.
197-11-720	Categorical exemption.
197-11-722	Consolidated appeal.
197-11-724	Consulted agency.
197-11-726	Cost-benefit analysis.
197-11-728	County/city.
197-11-730	Decisionmaker.
197-11-732	Department.
197-11-734	Determination of nonsignificance (DNS).
197-11-736	Determination of significance (DS).
197-11-738	EIS.
197-11-740	Environment.
197-11-742	Environmental checklist.
197-11-744	Environmental document.
197-11-746	Environmental review.
197-11-748	Environmentally sensitive area.
197-11-750	Expanded scoping.
197-11-752	Impacts.
197-11-754	Incorporation by reference.
197-11-756	Lands covered by water.
197-11-758	Lead agency.
197-11-760	License.
197-11-762	Local agency.
197-11-764	Major action.
197-11-766	Mitigated DNS.
197-11-768	Mitigation.
197-11-770	Natural environment.
197-11-772	NEPA.
197-11-774	Nonproject.
197-11-776	Phased review.
197-11-778	Preparation.
197-11-780	Private project.
197-11-782	Probable.
197-11-784	Proposal.
197-11-786	Reasonable alternative.
197-11-788	Responsible official.
197-11-790	SEPA.
197-11-792	Scope.
197-11-793	Scoping.
197-11-794	Significant.
197-11-796	State agency.
197-11-797	Threshold determination.

197-11-799	Underlying governmental action.
197-11-800	Categorical exemptions.
197-11-810	Exemptions and nonexemptions applicable to specific state agencies.
197-11-855	Department of ecology.
197-11-880	Emergencies.
197-11-890	Petitioning DOE to change exemptions.
197-11-900	Purpose of this part.
197-11-908	Environmentally sensitive areas.
197-11-912	Procedures on consulted agencies.
197-11-916	Application to ongoing actions.
197-11-917	Relationship to chapter 197-10 WAC.
197-11-920	Agencies with environmental expertise.
197-11-922	Lead agency rules.
197-11-924	Determining the lead agency.
197-11-926	Lead agency for governmental proposals.
197-11-928	Lead agency for public and private proposals.
197-11-930	Lead agency for private projects with one agency with jurisdiction.
197-11-932	Lead agency for private projects requiring licenses from more than one agency, when one of the agencies is a county/city.
197-11-934	Lead agency for private projects requiring licenses from a local agency, not a county/city, and one or more state agencies.
197-11-936	Lead agency for private projects requiring licenses from more than one state agency.
197-11-938	Lead agencies for specific proposals.
197-11-940	Transfer of lead agency status to a state agency.
197-11-942	Agreements on lead agency status.
197-11-944	Agreements on division of lead agency duties.
197-11-946	DOE resolution of lead agency disputes.
197-11-948	Assumption of lead agency status.
197-11-960	Environmental checklist.
197-11-965	Adoption notice.
197-11-970	Determination of nonsignificance (DNS).
197-11-980	Determination of significance and scoping notice (DS).
197-11-985	Notice of assumption of lead agency status.
197-11-990	Notice of action.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-020, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-030 Purpose. This chapter implements the statewide rules in chapter 197-11 WAC as they apply to the department of ecology.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-030, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-040 Additional definitions. In addition to the definitions contained in WAC 197-11-700 through 197-11-799, the following terms shall have the listed meanings:

(1) "Office" means one of the five offices in the department of ecology supervised by an assistant director.

(2) "Region" means any one of the four regional offices of the department.

(3) "Program" means any one of the department's headquarters sections or divisions that administers a program, such as water quality, water resources, shorelands, and hazardous waste.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-040, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-050 Designation of responsible official. Within the department of ecology, the ultimate responsible official is the director. The responsible official for a specific proposal shall be the person who has been delegated signature authority per WAC 173-06-030, unless more than one person has such authority in a proposal; if so, the responsible official shall be either the next higher supervisor common to all involved persons, or any senior professional staff designated by the deputy director.

[Statutory Authority: Chapter 43.21A RCW. 89-11-021 and 90-07-014 (Order 89-6 and 89-6A), § 173-802-050, filed 5/11/89 and 3/13/90, effective 4/13/90. Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-050, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-060 Additional timing considerations. (1) Department staff receiving a permit application will determine whether the proposal is an "action" and, if so, whether it is "categorically exempt" from SEPA. If the proposal is an action and is not exempt, the staff person should ask the applicant to complete an environmental checklist. A checklist is not needed if the department and applicant agree an EIS is required, SEPA compliance has been completed, SEPA compliance has been initiated by another agency, or a checklist is included with the application. The applicant should also complete an environmental checklist if the staff person is unsure whether the proposal is exempt.

(2) Department staff receiving a completed permit application and environmental checklist should determine whether WDOE or another agency is SEPA lead agency (see WAC 197-11-050 and 197-11-922 through 197-11-940) within five working days. If WDOE is not the lead agency, the staff person shall send the completed environmental checklist, a copy of the permit application, to the lead agency, and an explanation of the determination to the identified lead agency.

(3) When the department has prepared a draft regulation, the draft EIS or determination of nonsignificance (DNS) shall accompany the draft regulation to the ecological commission for its review.

(4) If the only nonexempt action is department approval of detailed project plans and specifications, an applicant may request that the department complete SEPA compliance before the applicant submits the detailed plans and specifications. If the applicant asks for early environmental review, the department shall complete such review at the final engineering report stage, but not earlier.

(5) Whenever possible, the department shall coordinate the comment periods for environmental documents and the planning documents and/or regulations for which they were written, circulating both documents together.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-060, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-070 Threshold determination process—Additional considerations. When reviewing a completed environmental checklist to make the threshold determination, the responsible official or his designee will:

(1) Independently evaluate the responses of the applicant and note comments, concerns, corrections, or new information in the right margin of the checklist.

(2) Conduct the initial review of the checklist and any supporting documents without requiring additional information from the applicant.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-070, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-080 Mitigated DNS. (1) An applicant may ask the department whether issuance of a DS is likely for a proposal. This request for early notice must:

(a) Be written;

(b) Follow submission of a permit application and environmental checklist for a nonexempt proposal for which the department is lead agency; and

(c) Precede the department's actual threshold determination for the proposal.

(2) The responsible official or his designee shall respond to the request within ten working days of receipt of the letter; the response shall:

(a) Be written;

(b) State whether the department is considering issuance of a DS;

(c) Indicate the general or specific area(s) of concern that led the department to consider a DS; and

(d) State that the applicant may change or clarify the proposal to mitigate the impacts indicated in the letter, revising the environmental checklist as necessary to reflect the changes or clarifications.

(3) The department shall not continue with the threshold determination until after receiving a written response from the applicant changing or clarifying the proposal or asking that the threshold determination be based on the original proposal.

(4) If the applicant submits a changed or clarified proposal, along with a revised environmental checklist, the department will make its threshold determination based on the changed or clarified proposal.

(a) If the department's response to the request for early notice indicated specific mitigation measures that would remove all probable significant adverse environmental impacts, and the applicant changes or clarifies the proposal to include all of those specific mitigation measures, the department shall issue a determination of nonsignificance and circulate the DNS for comments as in WAC 197-11-350(2).

(b) If the department indicated general or specific areas of concern, but did not indicate specific mitigation measures that would allow it to issue a DNS, the department shall determine if the changed or clarified proposal may have a probable significant environmental impact, issuing a DNS or DS as appropriate.

(5) The department may specify mitigation measures that would allow it to issue a DNS without a request for early notice from an applicant. If it does so, and the applicant changes or clarifies the proposal to include those measures, the department shall issue a DNS and circulate it for review under WAC 197-11-350(2).

(6) When an applicant changes or clarifies the proposal, the clarifications or changes may be included in written attachments to the documents already submitted. If the environmental checklist and supporting documents would be difficult to read and/or understand because of the need to read them in conjunction with the attachment(s), the department may require the applicant to submit a new checklist.

(7) The department may change or clarify features of its own proposals before making the threshold determination.

(8) The department's written response under subsection (2) of this section shall not be construed as a determination of significance. In addition, preliminary discussion of clarification of or changes to a proposal, as opposed to a written request for early notice, shall not bind the department to consider the clarifications or changes in its threshold determination.

(9) When an applicant submits a changed or clarified proposal pursuant to this section, it shall be considered part of the applicant's application for a permit or other approval for all purposes, including enforcement of the permit or other approval. Unless the department's decision expressly states otherwise, when a mitigated DNS is issued for a proposal, any decision approving the proposal shall be based on the proposal as changed or clarified pursuant to this section.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-080, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-090 EIS preparation. (1) Preparation of draft and final EISs and SEISs is the responsibility of the environmental review section. Before the department issues an EIS, the responsible official shall be satisfied that it complies with these rules and chapter 197-11 WAC.

(2) The department normally will prepare its own draft and final EISs. It may require an applicant to provide information that the department does not possess, including specific investigations. However, the applicant is not required to supply information that is not required under these rules.

(3) If the department would be unable to prepare a draft and/or final EIS due to its commitments or other constraints or when a local agency transfers lead agency status to the department under WAC 197-11-940, the department may allow an applicant the following option for preparation of the draft and/or final EIS for the applicant's proposal:

(a) The department retains a mutually agreed upon and independent outside party to prepare the document.

(b) The applicant and the department agree upon a method of funding in which the applicant will bear the expense of the EIS preparation, but the consultant will work directly for the department.

(c) The outside party will prepare the document under the supervision of the environmental review section and the responsible official.

(d) Normally, the department will print and distribute the documents.

(4) Whenever someone other than the department prepares a draft or final EIS, the department shall:

(a) Direct the areas of research and examination to be undertaken and the content and organization of the document.

(b) Initiate and coordinate scoping, ensuring that the individual preparing the EIS receives all substantive information submitted by any agency or person.

(c) Assist in obtaining information on file with another agency that is needed by the person preparing the EIS.

(d) Allow the person preparing the EIS access to department records relating to the EIS (under chapter 42.17 RCW—Public disclosure and public records law).

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-090, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-100 Public notice requirements. (1) The department shall give public notice when issuing a DNS under WAC 197-11-350(2), a scoping notice under WAC 173-802-090, or a draft EIS under WAC 197-11-455.

(2) Whenever possible, the department shall integrate the public notice required under this section with existing notice procedures for the department's permit or approval required for the proposal.

(a) When more than one permit or approval required from the department has public notice requirements, the notice procedures that would reach the widest audience should be used, if possible.

(b) If the public notice requirements for the permit or approval must be completed at a specific time in the permitting process and that timing does not coincide with the timing requirements for SEPA public notice, the department must use one or more public notice methods in subsection (4) of this section.

(c) If there are no public notice requirements for any of the permits/approvals required for a proposal, the department must use one or more public notice methods in subsection (4) of this section.

(3) The department may require an applicant to perform the public notice requirement at his or her expense.

(4) The department shall use one or more of the following methods of public notice, taking into consideration the geographic area affected by the proposal, the size and complexity of the proposal, the public notice requirements for the permit or approval required from the department, public interest expressed in the proposal, and whether the proposal is a project or regulation:

(a) Mailing to persons or groups who have expressed interest in the proposal, that type of proposal, or proposals in the geographic area in which the proposal will be implemented if approved;

(b) Publication in a newspaper of general circulation in the area in which the proposal will be implemented; and/or

(c) Posting the property, for site-specific proposals.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-100, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-110 Policies and procedures for conditioning or denying permits or other approvals. (1)(a) The overriding policy of the department of ecology is to avoid or mitigate adverse environmental impacts which may result from the department's decisions.

(b) The department of ecology shall use all practicable means, consistent with other essential considerations of state policy, to improve and coordinate plans, functions, programs, and resources to the end that the state and its citizens may:

(i) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(ii) Assure for all people of Washington safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

(iii) Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(iv) Preserve important historic, cultural, and natural aspects of our national heritage;

(v) Maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(vi) Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(vii) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(c) The department recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

(d) The department shall ensure that presently unquantified environmental amenities and values will be given appropriate consideration in decision making along with economic and technical considerations.

(2)(a) When the environmental document for a proposal shows it will cause significant adverse impacts that the proponent does not plan to mitigate, the responsible official shall consider whether:

(i) The environmental document identified mitigation measures that are reasonable and capable of being accomplished;

(ii) Other local, state, or federal requirements and enforcement would mitigate the significant adverse environmental impacts; and

(iii) Reasonable mitigation measures are sufficient to mitigate the significant adverse impacts.

(b) The responsible official may:

(i) Condition the approval for a proposal if mitigation measures are reasonable and capable of being accomplished and the proposal is inconsistent with the policies in subsection (1) of this section.

(ii) Deny the permit or approval for a proposal if reasonable mitigation measures are insufficient to mitigate significant adverse environmental impacts and the proposal is inconsistent with the policies in subsection (1) of this section.

(c) The procedures in WAC 197-11-660 must also be followed when conditioning or denying permits or other approvals.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-110, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-120 Environmentally sensitive areas. (1) In determining whether a proposal is exempt from SEPA, the department shall respect "environmentally sensitive area" designations made by local governments under WAC 197-11-908.

(2) The department shall maintain files of the maps and SEPA procedures that cities/counties must send to the department under WAC 197-11-908. The department shall allow the public, groups, and agencies to review these SEPA procedures and maps during normal business hours.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-120, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-130 Threshold levels adopted by cities/counties. (1) In determining whether a proposal is exempt from SEPA, the department shall respect the threshold levels adopted by cities/counties under WAC 197-11-800(1).

(2) The department shall maintain files of the SEPA procedures that cities/counties must send to the department under WAC 197-11-800 (1)(c). The department shall allow the public, groups, and agencies access to these SEPA procedures during normal business hours.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-130, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-140 Responsibilities of individuals and work units within the department. (1) The environmental review section of the department shall be responsible for the following:

(a) Coordinating agency activities to comply with SEPA, encouraging consistency in SEPA compliance among all regions and programs.

(b) Providing information and guidance on SEPA and the SEPA rules to department staff, agencies, groups, and citizens.

(c) Receiving all SEPA documents sent to the department for review and comment, distributing documents and coordinating review with appropriate regions and programs, preparing the department's response, ensuring a timely response, and requesting extensions to the comment period of an EIS, when needed.

(d) Preparing and publishing the SEPA register weekly as required under WAC 197-11-508.

(e) Maintaining the department's files for EISs, DNSs, scoping notices, and notices of action sent to the department under SEPA and the SEPA rules.

(f) Maintaining files for the city/county SEPA procedures designating environmentally sensitive areas and flexible thresholds and making the information available to department staff and the public.

(g) Writing and/or coordinating EIS preparation, including scoping and the scoping notice, making sure to work with appropriate regions and programs.

(h) Preparing for, coordinating, and presenting annual SEPA workshops and publishing an annual SEPA handbook.

(i) Publishing and distributing the SEPA rules and amending the SEPA rules, as necessary.

(j) Responding to petitions for changes in exemptions from SEPA.

(k) Responding to petitions to resolve lead agency disputes.

(l) Fulfilling the department's other general responsibilities under SEPA and the SEPA rules.

(2) Regional offices and programs of the department shall be responsible for the following:

(a) Determining whether their decision on a permit or other approval, program, policy, plan, or regulation is an "action" under SEPA and, if so, whether it is exempt from SEPA's requirements (the first department official contacted may make these determinations).

(b) Determining whether WDOE or another agency is SEPA lead agency, contacting the environmental review section if there is a question about which agency is the lead agency.

(c) Making the threshold determination (made by the responsible official, see WAC 173-802-050).

(i) Issuing a determination of nonsignificance, if appropriate (issued by responsible official) and ensuring compliance with the public notice requirements of WAC 173-802-100; or

(ii) Contacting the environmental review section if a determination of significance is appropriate.

(d) Reviewing SEPA documents and submitting comments to the environmental review section in a timely fashion, recognizing that SEPA and the SEPA rules impose strict time limits on commenting.

(e) Working with the environmental review section on preparation of EISs.

(f) Ensuring that permit decisions are consistent with the final EIS and DNS.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-140, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-150 Coordination on combined department—Federal action. When the department is considering an action which also involves federal actions, it shall attempt to coordinate the two governmental processes so that only one environmental impact statement need be prepared for that proposal.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-150, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-190 Severability. If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of this chapter, or the application of the provision to other persons or circumstances, shall not be affected.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-190, filed 6/15/84. Formerly chapter 173-801 WAC.]

Chapter 173-806 WAC
MODEL ORDINANCE

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-806-055 Additional considerations in time limits applicable to the SEPA process. [Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-055, filed 6/15/84. Formerly WAC 173-805-040.] Repealed by 98-23-038 (Order 95-16 Phase 2), filed 11/10/98, effective 12/11/98. Statutory Authority: RCW 43.21C.130.

PART ONE
AUTHORITY

WAC 173-806-010 Authority. The city/county of ..... adopts this ordinance under the State Environmental Policy Act (SEPA), RCW 43.21C.120, and the SEPA rules, WAC 197-11-904.

This ordinance contains this city's/county's SEPA procedures and policies.

The SEPA rules, chapter 197-11 WAC, must be used in conjunction with this ordinance.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-010, filed 6/15/84. Formerly WAC 173-805-010.]

PART TWO
GENERAL REQUIREMENTS

WAC 173-806-020 Purpose of this part and adoption by reference. This part contains the basic requirements that apply to the SEPA process. The city/county adopts the following sections of chapter 197-11 of the Washington Administrative Code by reference:

WAC	
197-11-040	Definitions.
197-11-050	Lead agency.
197-11-060	Content of environmental review.
197-11-070	Limitations on actions during SEPA process.
197-11-080	Incomplete or unavailable information.
197-11-090	Supporting documents.
197-11-100	Information required of applicants.
197-11-158	GMA project review—Reliance on existing plans, laws, and regulations.
197-11-210	SEPA/GMA integration. (WAC 197-11-210 through 197-11-235 optional; does not apply for non-GMA jurisdictions.)
197-11-220	SEPA/GMA definitions.
197-11-228	Overall SEPA/GMA integration procedures.
197-11-230	Timing of an integrated GMA/SEPA process.
197-11-232	SEPA/GMA integration procedures for preliminary planning, environmental analysis, and expanded scoping.
197-11-235	Documents.
197-11-238	Monitoring. (optional)
197-11-250	SEPA/Model Toxics Control Act integration.
197-11-253	SEPA lead agency for MTCA actions.
197-11-256	Preliminary evaluation.
197-11-259	Determination of nonsignificance for MTCA remedial actions.
197-11-262	Determination of significance and EIS for MTCA remedial actions.

197-11-265	Early scoping for MTCA remedial actions.
197-11-268	MTCA interim actions.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-020, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-020, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-030 Additional definitions. In addition to those definitions contained within WAC 197-11-700 through 197-11-799 and 197-11-220, when used in this ordinance, the following terms shall have the following meanings, unless the context indicates otherwise:

(1) "Department" means any division, subdivision or organizational unit of the city/county established by ordinance, rule, or order.

(2) "SEPA rules" means chapter 197-11 WAC adopted by the department of ecology.

(3) "Ordinance" means the ordinance, resolution, or other procedure used by the city/county to adopt regulatory requirements.

(4) "Early notice" means the city's/county's response to an applicant stating whether it considers issuance of a determination of significance likely for the applicant's proposal (mitigated determination of nonsignificance (DNS) procedures).

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-030, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-030, filed 6/15/84. Formerly WAC 173-805-030.]

WAC 173-806-040 Designation of responsible official. (1) *(Note: Use Option 1 or 2, but not both.) (Option 1)* For those proposals for which the city/county is the lead agency, the responsible official shall be *(Note: Indicate position title, level within city's/county's organization, elected official title or legislative body)*...

(Option 2) For public proposals, the head (administrative official) of the department making the proposal shall be the responsible official. For private proposals, the head (administrative official) of the department with primary responsibility for approving the permits and licenses for the proposal shall be the responsible official. When multiple officials have permitting authority, the assignment of responsibility shall be reached by agreement.

(2) For all proposals for which the city/county is the lead agency, the responsible official shall make the threshold determination, supervise scoping and preparation of any required environmental impact statement (EIS), and perform any other functions assigned to the "lead agency" or "responsible official" by those sections of the SEPA rules that were adopted by reference in WAC 173-806-020.

(3) The city/county shall retain all documents required by the SEPA rules (chapter 197-11 WAC) and make them available in accordance with chapter 42.17 RCW.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-040, filed 6/15/84. Formerly WAC 173-805-115.]

WAC 173-806-050 Lead agency determination and responsibilities. (1) The department within the city/county receiving an application for or initiating a proposal that involves a nonexempt action shall determine the lead agency for that proposal under WAC 197-11-050, 197-11-253, and 197-11-922 through 197-11-940; unless the lead agency has been previously determined or the department is aware that another department or agency is in the process of determining the lead agency.

(2) When the city/county is the lead agency for a proposal, the department receiving the application shall determine the responsible official who shall supervise compliance with the threshold determination requirements, and if an EIS is necessary, shall supervise preparation of the EIS.

(3) When the city/county is not the lead agency for a proposal, all departments of the city/county shall use and consider, as appropriate, either the DNS or the final EIS of the lead agency in making decisions on the proposal. No city/county department shall prepare or require preparation of a DNS or EIS in addition to that prepared by the lead agency, unless required under WAC 197-11-600. In some cases, the city/county may conduct supplemental environmental review under WAC 197-11-600.

(4) If the city/county or any of its departments receives a lead agency determination made by another agency that appears inconsistent with the criteria of WAC 197-11-253 or 197-11-922 through 197-11-940, it may object to the determination. Any objection must be made to the agency originally making the determination and resolved within fifteen days of receipt of the determination, or the city/county must petition the department of ecology for a lead agency determination under WAC 197-11-946 within the fifteen-day time period. Any such petition on behalf of the city/county may be initiated by ...

(5) Departments of the city/county are authorized to make agreements as to lead agency status or shared lead agency duties for a proposal under WAC 197-11-942 and 197-11-944: Provided, That the responsible official and any department that will incur responsibilities as the result of such agreement approve the agreement.

(6) Any department making a lead agency determination for a private project shall require sufficient information from the applicant to identify which other agencies have jurisdiction over the proposal (That is: Which agencies require nonexempt licenses?).

(7) When the city/county is lead agency for a MTCA remedial action, the department of ecology shall be provided an opportunity under WAC 197-11-253(5) to review the environmental documents prior to public notice being provided. If the SEPA and MTCA documents are issued together with one public comment period under WAC 197-11-253(6), the city/county shall decide jointly with ecology who receives the comment letters and how copies of the comment letters will be distributed to the other agency.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-050, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-050, filed 6/15/84. Formerly WAC 173-805-070.]

WAC 173-806-053 Transfer of lead agency status to a state agency. *(Optional for cities or towns under 5,000 population and counties with a population under eighteen thousand.)* For any proposal for a private project where the city/county would be the lead agency and for which one or more state agencies have jurisdiction, the city's/county's

responsible official may elect to transfer the lead agency duties to a state agency. The state agency with jurisdiction appearing first on the priority listing in WAC 197-11-936 shall be the lead agency and the city/county shall be an agency with jurisdiction. To transfer lead agency duties, the city's/county's responsible official must transmit a notice of the transfer together with any relevant information available on the proposal to the appropriate state agency with jurisdiction. The responsible official of the city/county shall also give notice of the transfer to the private applicant and any other agencies with jurisdiction over the proposal.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-053, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-053, filed 6/15/84. Formerly WAC 173-805-053.]

WAC 173-806-058 Additional timing considerations. (1) For nonexempt proposals, the DNS or *(Note: Select either draft or final EIS.)* ... EIS for the proposal shall accompany the city's/county's staff recommendation to any appropriate advisory body, such as the planning commission.

(2) *(This subsection may be used by non-GMA jurisdictions, and by GMA jurisdictions for permits not subject to the notice of application requirements of RCW 36.70B.110.)* If the city's/county's only action on a proposal is a decision on a building permit or other license that requires detailed project plans and specifications, the applicant may request in writing that the city/county conduct environmental review prior to submission of the detailed plans and specifications. *(Note: The following may be added.)* The point at which environmental review may be initiated for specific permits or other licenses requiring detailed project plans and specifications is ...

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-058, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-058, filed 6/15/84. Formerly chapter 173-805 WAC.]

PART THREE
CATEGORICAL EXEMPTIONS AND THRESHOLD DETERMINATIONS

WAC 173-806-065 Purpose of this part and adoption by reference. This part contains the rules for deciding whether a proposal has a "probable significant, adverse environmental impact" requiring an environmental impact statement (EIS) to be prepared. This part also contains rules for evaluating the impacts of proposals not requiring an EIS. The city/county adopts the following sections by reference, as supplemented in this part:

WAC	
197-11-300	Purpose of this part.
197-11-305	Categorical exemptions.
197-11-310	Threshold determination required.
197-11-315	Environmental checklist.
197-11-330	Threshold determination process.
197-11-335	Additional information.
197-11-340	Determination of nonsignificance (DNS).
197-11-350	Mitigated DNS.
197-11-355	Optional DNS process.
197-11-360	Determination of significance (DS)/initiation of scoping.
197-11-390	Effect of threshold determination.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-065, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-065, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-070 Flexible thresholds for categorical exemptions. *(Note: This section is optional. The lowest exempt level in the ranges below apply unless the city/county raises the level based on local conditions, such as previous DNSs on the activities or city/county development codes. The city/county may raise the level for an exemption to any point up to the maximum specified in WAC 197-11-800 (1)(c); once levels are established in this ordinance, the city/county must apply a level to all projects within the geographic area to which the level applies.)*

(1)... city/county establishes the following exempt levels for minor new construction under WAC 197-11-800 (1)(b) based on local conditions:

(a) For residential dwelling units in WAC 197-11-800 (1)(b)(i) *(Note: Range 4 - 20 units):* Up to ... dwelling units.

(b) For agricultural structures in WAC 197-11-800 (1)(b)(ii) *(Note: Range 10,000 - 30,000 square feet):* Up to ... square feet.

(c) For office, school, commercial, recreational, service or storage buildings in WAC 197-11-800 (1)(b)(iii) *(Note: Range 4,000 - 12,000 square feet and 20 - 40 parking spaces):* Up to ... square feet and up to ... parking spaces.

(d) For parking lots in WAC 197-11-800 (1)(b)(iv) *(Note: Range 20 - 40 parking spaces):* Up to ... parking spaces.

(e) For landfills and excavations in WAC 197-11-800 (1)(b)(v) *(Note: Range 100 - 500 cubic yards):* Up to ..... cubic yards.

(2) Whenever the city/county establishes new exempt levels under this section, it shall send them to the Department of Ecology, Headquarters Office, Olympia, Washington, 98504 under WAC 197-11-800 (1)(c).

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-070, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-080 Use of exemptions. (1) Each department within the city/county that receives an application for a license or, in the case of governmental proposals, the department initiating the proposal, shall determine whether the license and/or the proposal is exempt. The department's determination that a proposal is exempt shall be final and not subject to administrative review. If a proposal is exempt, none of the procedural requirements of this ordinance apply to the proposal. The city/county shall not require completion of an environmental checklist for an exempt proposal.

(2) In determining whether or not a proposal is exempt, the department shall make certain the proposal is properly defined and shall identify the governmental licenses required (WAC 197-11-060). If a proposal includes exempt and nonexempt actions, the department shall determine the lead

agency, even if the license application that triggers the department's consideration is exempt.

(3) If a proposal includes both exempt and nonexempt actions, the city/county may authorize exempt actions prior to compliance with the procedural requirements of this ordinance, except that:

(a) The city/county shall not give authorization for:

(i) Any nonexempt action;

(ii) Any action that would have an adverse environmental impact; or

(iii) Any action that would limit the choice of alternatives.

(b) A department may withhold approval of an exempt action that would lead to modification of the physical environment, when such modification would serve no purpose if nonexempt action(s) were not approved; and

(c) A department may withhold approval of exempt actions that would lead to substantial financial expenditures by a private applicant when the expenditures would serve no purpose if nonexempt action(s) were not approved.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-080, filed 6/15/84. Formerly WAC 173-805-060.]

WAC 173-806-090 Environmental checklist. (1) *(Use Option 1 or 2, but not both) (Option 1, using checklist from the rules without changes.)* Except as provided in subsection (4) of this section, a (this exception is added for jurisdictions wishing to use planned actions) completed environmental checklist (or a copy), in the form provided in WAC 197-11-960, shall be filed at the same time as an application for a permit, license, certificate, or other approval not specifically exempted in this ordinance; except, a checklist is not needed if the city/county and applicant agree an EIS is required, SEPA compliance has been completed, or SEPA compliance has been initiated by another agency. The city/county shall use the environmental checklist to determine the lead agency and, if the city/county is the lead agency, for determining the responsible official and for making the threshold determination.

(Option 2, adding questions to the checklist.) A completed environmental checklist shall be filed at the same time as an application for a permit, license, certificate, or other approval not exempted in this ordinance; except, a checklist is not needed if the city/county and applicant agree an EIS is required, SEPA compliance has been completed, or SEPA compliance has been initiated by another agency. Except as provided in subsection (4) of this section, the checklist shall be in the form of WAC 197-11-960 with the following additions: *(Indicate city's/county's additions.)*...

(2) For private proposals, the city/county will require the applicant to complete the environmental checklist, providing assistance as necessary. For city/county proposals, the department initiating the proposal shall complete the environmental checklist for that proposal.

(3) *(Optional.)* The city/county may require that it, and not the private applicant, will complete all or part of the environmental checklist for a private proposal, if either of the following occurs: *(Either one or both of the following may be included.)*

(a) The city/county has technical information on a question or questions that is unavailable to the private applicant; or

(b) The applicant has provided inaccurate information on previous proposals or on proposals currently under consideration.

(4) *(This subsection is to be used only by jurisdictions wishing to use planned actions.)* For projects submitted as planned actions under WAC 197-11-164, the city/county shall use its existing environmental checklist form or may modify the environmental checklist form as provided in WAC 197-11-315. The modified environmental checklist form may be prepared and adopted along with or as part of a planned action ordinance; or developed after the ordinance is adopted. In either case, a proposed modified environmental checklist form must be sent to the department of ecology to allow at least a thirty-day review prior to use.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-090, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-090, filed 6/15/84. Formerly WAC 173-805-090.]

WAC 173-806-100 Mitigated DNS. (1) As provided in this section and in WAC 197-11-350, the responsible official may issue a DNS based on conditions attached to the proposal by the responsible official or on changes to, or clarifications of, the proposal made by the applicant.

(2) An applicant may request in writing early notice of whether a DS is likely under WAC 197-11-350. The request must:

(a) Follow submission of a permit application and environmental checklist for a nonexempt proposal for which the department is lead agency; and

(b) Precede the city's/county's actual threshold determination for the proposal.

(3) The responsible official should respond to the request for early notice within ... working days. The response shall:

(a) Be written;

(b) State whether the city/county currently considers issuance of a DS likely and, if so, indicate the general or specific area(s) of concern that is/are leading the city/county to consider a DS; and

(c) State that the applicant may change or clarify the proposal to mitigate the indicated impacts, revising the environmental checklist and/or permit application as necessary to reflect the changes or clarifications.

(4) As much as possible, the city/county should assist the applicant with identification of impacts to the extent necessary to formulate mitigation measures.

(5) When an applicant submits a changed or clarified proposal, along with a revised or amended environmental checklist, the city/county shall base its threshold determination on the changed or clarified proposal and should make the determination within fifteen days of receiving the changed or clarified proposal:

(a) If the city/county indicated specific mitigation measures in its response to the request for early notice, and the applicant changed or clarified the proposal to include those specific mitigation measures, the city/county shall issue and circulate a DNS under WAC 197-11-340(2).

(b) If the city/county indicated areas of concern, but did not indicate specific mitigation measures that would allow it to issue a DNS, the city/county shall make the threshold determination, issuing a DNS or DS as appropriate.

(c) The applicant's proposed mitigation measures (clarifications, changes or conditions) must be in writing and must be specific. For example, proposals to "control noise" or "prevent stormwater runoff" are inadequate, whereas proposals to "muffle machinery to X decibel" or "construct 200-foot stormwater retention pond at Y location" are adequate.

(d) Mitigation measures which justify issuance of a mitigated DNS may be incorporated in the DNS by reference to agency staff reports, studies or other documents.

(6) *(Note: GMA counties/cities may use either Option 1 or 2; non-GMA counties/cities must use Option 1.) (Option 1)* A mitigated DNS is issued under WAC 197-11-340(2), requiring a fourteen-day comment period and public notice. *(Option 2)* A mitigated DNS is issued under either WAC 197-11-340(2), requiring a fourteen-day comment period and public notice, or WAC 197-11-355, which may require no additional comment period beyond the comment period on the notice of application.

(7) Mitigation measures incorporated in the mitigated DNS shall be deemed conditions of approval of the permit decision and may be enforced in the same manner as any term or condition of the permit, or enforced in any manner specifically prescribed by the city/county.

(8) If the city's/county's tentative decision on a permit or approval does not include mitigation measures that were incorporated in a mitigated DNS for the proposal, the city/county should evaluate the threshold determination to assure consistency with WAC 197-11-340 (3)(a) (withdrawal of DNS).

(9) The city's/county's written response under subsection (2) of this section shall not be construed as a determination of significance. In addition, preliminary discussion of clarifications or changes to a proposal, as opposed to a written request for early notice, shall not bind the city/county to consider the clarifications or changes in its threshold determination.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-100, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-100, filed 6/15/84. Formerly chapter 173-805 WAC.]

PART FOUR
ENVIRONMENTAL IMPACT STATEMENT (EIS)

WAC 173-806-110 Purpose of this part and adoption by reference. This part contains the rules for preparing environmental impact statements. The city/county adopts the following sections by reference, as supplemented by this part:

WAC

197-11-400	Purpose of EIS.
197-11-402	General requirements.
197-11-405	EIS types.
197-11-406	EIS timing.
197-11-408	Scoping.
197-11-410	Expanded scoping. (Optional)
197-11-420	EIS preparation.
197-11-425	Style and size.
197-11-430	Format.
197-11-435	Cover letter or memo.
197-11-440	EIS contents.
197-11-442	Contents of EIS on nonproject proposals.
197-11-443	EIS contents when prior nonproject EIS.
197-11-444	Elements of the environment.
197-11-448	Relationship of EIS to other considerations.
197-11-450	Cost-benefit analysis.
197-11-455	Issuance of DEIS.
197-11-460	Issuance of FEIS.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-110, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-120 Preparation of EIS—Additional considerations. (1) Preparation of draft and final EISs (DEIS and FEIS) and draft and final supplemental EISs (SEIS) is the responsibility of *(department)* under the direction of the responsible official. Before the city/county issues an EIS, the responsible official shall be satisfied that it complies with this ordinance and chapter 197-11 WAC.

(2) The DEIS and FEIS or draft and final SEIS shall be prepared by city/county staff, the applicant, or by a consultant selected by the city/county or the applicant. If the responsible official requires an EIS for a proposal and determines that someone other than the city/county will prepare the EIS, the responsible official shall notify the applicant immediately after completion of the threshold determination. The responsible official shall also notify the applicant of the city's/county's procedure for EIS preparation, including approval of the DEIS and FEIS prior to distribution.

(3) The city/county may require an applicant to provide information the city/county does not possess, including specific investigations. However, the applicant is not required to supply information that is not required under this ordinance or that is being requested from another agency. (This does not apply to information the city/county may request under another ordinance or statute.)

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-120, filed 6/15/84. Formerly WAC 173-805-100.]

WAC 173-806-125 Additional elements to be covered in an EIS. *(This entire section is optional. If used, you may select any of the listed elements or add your own.)* The following additional elements are part of the environment for the purpose of EIS content, but do not add to the criteria for threshold determinations or perform any other function or purpose under this ordinance:

(1) Economy.

(2) Social policy analysis.

(3) Cost-benefit analysis.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-125, filed 6/15/84. Formerly WAC 173-805-105.]

PART FIVE
COMMENTING

WAC 173-806-128 Adoption by reference. This part contains rules for consulting, commenting, and responding on all environmental documents under SEPA, including rules

for public notice and hearings. The city/county adopts the following sections by reference, as supplemented in this part:

WAC	
197-11-500	Purpose of this part.
197-11-502	Inviting comment.
197-11-504	Availability and cost of environmental documents.
197-11-508	SEPA register.
197-11-510	Public notice.
197-11-535	Public hearings and meetings.
197-11-545	Effect of no comment.
197-11-550	Specificity of comments.
197-11-560	FEIS response to comments.
197-11-570	Consulted agency costs to assist lead agency.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-128, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-128, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-130 Public notice. *(This section is required for non-GMA cities and counties. Subsections (1) and (2) of this section may be combined.)* (1) Whenever ...city/county issues a DNS under WAC 197-11-340(2) or a DS under WAC 197-11-360(3) the city/county shall give public notice as follows:

(a) If public notice is required for a nonexempt license, the notice shall state whether a DS or DNS has been issued and when comments are due.

(b) If no public notice is required for the permit or approval, the city/county shall give notice of the DNS or DS by: *(Note: Select at least one of the following)*

(i) Posting the property, for site-specific proposals;

(ii) Publishing notice in a newspaper of general circulation in the county, city, or general area where the proposal is located;

(iii) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(iv) Notifying the news media;

(v) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(vi) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (either general lists or lists for specific proposals for subject areas);

(vii) *(or, specify other method)...*

(c) Whenever the city/county issues a DS under WAC 197-11-360(3), the city/county shall state the scoping procedure for the proposal in the DS as required in WAC 197-11-408 and in the public notice.

(2) Whenever the city/county issues a DEIS under WAC 197-11-455(5) or a SEIS under WAC 197-11-620, notice of the availability of those documents shall be given by:

(a) Indicating the availability of the DEIS in any public notice required for a nonexempt license; and *(Note: In addition select at least one of the following or insert all of the list and require that at least one method be used.)*

(b) Posting the property, for site-specific proposals;

(c) Publishing notice in a newspaper of general circulation in the county, city, or general area where the proposal is located;

(d) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(e) Notifying the news media;

(f) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(g) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (general lists or specific lists for proposals or subject areas); *(and/or*

(h) *specify other)...*

(3) Whenever possible, the city/county shall integrate the public notice required under this section with existing notice procedures for the city's/county's nonexempt permit(s) or approval(s) required for the proposal.

(4) The city/county may require an applicant to complete the public notice requirements for the applicant's proposal at his or her expense.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-130, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-130, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-132 Public notice. *(This section is required for GMA cities and counties. Subsections (1) and (2) of this section may be combined.)* (1) Whenever possible, the city/county shall integrate the public notice required under this section with existing notice procedures for the city's/county's nonexempt permit(s) or approval(s) required for the proposal.

(2) Whenever...city/county issues a DNS under WAC 197-11-340(2) or a DS under WAC 197-11-360(3) the city/county shall give public notice as follows:

(a) If public notice is required for a nonexempt license, the notice shall state whether a DS or DNS has been issued and when comments are due.

(b) If an environmental document is issued concurrently with the notice of application, the public notice requirements for the notice of application in RCW 36.70B.110(4) will suffice to meet the SEPA public notice requirements in WAC 197-11-510(1).

(c) If no public notice is otherwise required for the permit or approval, the city/county shall give notice of the DNS or DS by: *(Note: Select at least one of the following.)*

(i) Posting the property, for site-specific proposals;

(ii) Publishing notice in a newspaper of general circulation in the county, city, or general area where the proposal is located;

(iii) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(iv) Notifying the news media;

(v) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(vi) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (either general lists or lists for specific proposals for subject areas);

(vii) (or, specify other method)...

(d) Whenever the city/county issues a DS under WAC 197-11-360(3), the city/county shall state the scoping procedure for the proposal in the DS as required in WAC 197-11-408 and in the public notice.

(3) If a DNS is issued using the optional DNS process, the public notice requirements for a notice of application in RCW 36.70B.110(4) as supplemented by the requirements in WAC 197-11-355 will suffice to meet the SEPA public notice requirements in WAC 197-11-510 (1)(b).

(4) Whenever the city/county issues a DEIS under WAC 197-11-455(5) or a SEIS under WAC 197-11-620, notice of the availability of those documents shall be given by:

(a) Indicating the availability of the DEIS in any public notice required for a nonexempt license; and (Note: In addition select at least one of the following or insert all of the list and require that at least one method be used.)

(b) Posting the property, for site-specific proposals;

(c) Publishing notice in a newspaper of general circulation in the county, city, or general area where the proposal is located;

(d) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(e) Notifying the news media;

(f) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(g) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (general lists or specific lists for proposals or subject areas);

(h) (and/or specify other)...

(5) Public notice for projects that qualify as planned actions shall be tied to the underlying permit as specified in WAC 197-11-172(3).

(6) The city/county may require an applicant to complete the public notice requirements for the applicant's proposal at his or her expense.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-132, filed 11/10/98, effective 12/11/98.]

WAC 173-806-140 Designation of official to perform consulted agency responsibilities for the city/county. (1) The ...*(position title, department, or office)* shall be responsible for preparation of written comments for the city/county in response to a consultation request prior to a threshold determination, participation in scoping, and reviewing a DEIS.

(2) This *(person, department or office)* shall be responsible for the city's/county's compliance with WAC 197-11-550 whenever the city/county is a consulted agency and is authorized to develop operating procedures that will ensure that responses to consultation requests are prepared in a timely fashion and include data from all appropriate departments of the city/county.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-140, filed 6/15/84. Formerly WAC 173-805-110.]

PART SIX
USING EXISTING ENVIRONMENTAL DOCUMENTS

WAC 173-806-150 Purpose of this part and adoption by reference. This part contains rules for using and supplementing existing environmental documents prepared under SEPA or National Environmental Policy Act (NEPA) for the city's/county's own environmental compliance. The city/county adopts the following sections by reference:

WAC	
197-11-164	Planned actions—Definition and criteria.
197-11-168	Ordinances or resolutions designating planned actions—Procedures for adoption.
197-11-172	Planned actions—Project review.
197-11-600	When to use existing environmental documents.
197-11-610	Use of NEPA documents.
197-11-620	Supplemental environmental impact statement—Procedures.
197-11-625	Addenda—Procedures.
197-11-630	Adoption—Procedures.
197-11-635	Incorporation by reference—Procedures.
197-11-640	Combining documents.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-150, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-150, filed 6/15/84. Formerly WAC 173-805-020.]

PART SEVEN
SEPA AND AGENCY DECISIONS

WAC 173-806-155 Purpose of this part and adoption by reference. This part contains rules (and policies) for SEPA's substantive authority, such as decisions to mitigate or reject proposals as a result of SEPA. This part also contains procedures for appealing SEPA determinations to agencies or the courts. The city/county adopts the following sections by reference:

WAC	
197-11-650	Purpose of this part.
197-11-655	Implementation.
197-11-660	Substantive authority and mitigation.
197-11-680	Appeals.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-155, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-160 Substantive authority. (1) The policies and goals set forth in this ordinance are supplementary to those in the existing authorization of the city of .../... county.

(2) The (city/county) may attach conditions to a permit or approval for a proposal so long as:

(a) Such conditions are necessary to mitigate specific probable adverse environmental impacts identified in environmental documents prepared pursuant to this ordinance; and

(b) Such conditions are in writing; and

(c) The mitigation measures included in such conditions are reasonable and capable of being accomplished; and

(d) The city/county has considered whether other local, state, or federal mitigation measures applied to the proposal are sufficient to mitigate the identified impacts; and

(e) Such conditions are based on one or more policies in subsection (4) of this section and cited in the license or other decision document.

(3) The (city/county) may deny a permit or approval for a proposal on the basis of SEPA so long as:

(a) A finding is made that approving the proposal would result in probable significant adverse environmental impacts that are identified in a FEIS or final SEIS prepared pursuant to this ordinance; and

(b) A finding is made that there are no reasonable mitigation measures capable of being accomplished that are sufficient to mitigate the identified impact; and

(c) The denial is based on one or more policies identified in subsection (4) of this section and identified in writing in the decision document.

(4) The city/county designates and adopts by reference the following policies as the basis for the city's/county's exercise of authority pursuant to this section:

(a) The city/county shall use all practicable means, consistent with other essential considerations of state policy, to improve and coordinate plans, functions, programs, and resources to the end that the state and its citizens may:

(i) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(ii) Assure for all people of Washington safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

(iii) Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(iv) Preserve important historic, cultural, and natural aspects of our national heritage;

(v) Maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(vi) Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(vii) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(b) The city/county recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

(c) *(Optional.)* The city/county adopts by reference the policies in the following city/county *(codes, ordinances, resolutions, plans) ... (List the codes, ordinances, resolutions, or plans you have selected, such as zoning ordinance, building codes or comprehensive plans.)* ...

(d) *(Optional.)* The city/county establishes the following additional policies: ...

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-160, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-160, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-170 Appeals. (1) *(Agency administrative appeal is optional. If allowed, the statute requires that all of this subsection be included, except (c) of this subsection which is optional.)* ... city/county establishes the following administrative appeal procedures under RCW 43.21C.075 and WAC 197-11-680:

(Note: No model ordinance language has been prepared for administrative appeals, as there are many different choices a city or county can make. If you choose to offer administrative appeals, state your procedures here. Special note: If you do not wish to offer one specific type of administrative appeal, that of a nonelected official's decision conditioning or denying a proposal, RCW 43.21C.060 requires you to clearly state that you are eliminating that type of appeal.)

(b) For any appeal under this subsection, the city/county shall provide for a record that shall consist of the following:

(i) Findings and conclusions;

(ii) Testimony under oath; and

(iii) A taped or written transcript.

(c) *(Optional.)* The city/county may require the appellant to provide an electronic transcript.

(d) The procedural determination by the city's/county's responsible official shall carry substantial weight in any appeal proceeding.

(2) The city/county shall give official notice under WAC 197-11-680(5) whenever it issues a permit or approval for which a statute or ordinance establishes a time limit for commencing judicial appeal. *(The following is optional.)* The following permits or approvals require official notice: ...

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-170, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-170, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-173 Notice/statute of limitations. *(Optional.)* (1) The city/county, applicant for, or proponent of an action may publish a notice of action pursuant to RCW 43.21C.080 for any action.

(2) The form of the notice shall be substantially in the form provided in WAC 197-11-990. The notice shall be published by the city clerk or county auditor, applicant or proponent pursuant to RCW 43.21C.080.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-173, filed 6/15/84. Formerly WAC 173-805-135.]

PART EIGHT
DEFINITIONS

WAC 173-806-175 Purpose of this part and adoption by reference. This part contains uniform usage and definitions of terms under SEPA. The city/county adopts the following sections by reference, as supplemented by WAC 173-806-030:

WAC	
197-11-700	Definitions.
197-11-702	Act.
197-11-704	Action.
197-11-706	Addendum.
197-11-708	Adoption.
197-11-710	Affected tribe.

197-11-712	Affecting.
197-11-714	Agency.
197-11-716	Applicant.
197-11-718	Built environment.
197-11-720	Categorical exemption.
197-11-721	Closed record appeal.
197-11-722	Consolidated appeal.
197-11-724	Consulted agency.
197-11-726	Cost-benefit analysis.
197-11-728	County/city.
197-11-730	Decision maker.
197-11-732	Department.
197-11-734	Determination of nonsignificance (DNS).
197-11-736	Determination of significance (DS).
197-11-738	EIS.
197-11-740	Environment.
197-11-742	Environmental checklist.
197-11-744	Environmental document.
197-11-746	Environmental review.
197-11-750	Expanded scoping.
197-11-752	Impacts.
197-11-754	Incorporation by reference.
197-11-756	Lands covered by water.
197-11-758	Lead agency.
197-11-760	License.
197-11-762	Local agency.
197-11-764	Major action.
197-11-766	Mitigated DNS.
197-11-768	Mitigation.
197-11-770	Natural environment.
197-11-772	NEPA.
197-11-774	Nonproject.
197-11-775	Open record hearing.
197-11-776	Phased review.
197-11-778	Preparation.
197-11-780	Private project.
197-11-782	Probable.
197-11-784	Proposal.
197-11-786	Reasonable alternative.
197-11-788	Responsible official.
197-11-790	SEPA.
197-11-792	Scope.
197-11-793	Scoping.
197-11-794	Significant.
197-11-796	State agency.
197-11-797	Threshold determination.
197-11-799	Underlying governmental action.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-175, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-175, filed 6/15/84. Formerly WAC 173-805-020.]

PART NINE
CATEGORICAL EXEMPTIONS

WAC 173-806-180 Adoption by reference. The city/county adopts by reference the following rules for categorical exemptions, as supplemented in this ordinance, including WAC 173-806-070 (Flexible thresholds), WAC 173-806-080 (Use of exemptions), and WAC 173-806-190 (Critical areas):

WAC	
197-11-800	Categorical exemptions.
197-11-880	Emergencies.
197-11-890	Petitioning DOE to change exemptions.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-180, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-180, filed 6/15/84. Formerly WAC 173-805-020.]

PART TEN
AGENCY COMPLIANCE

WAC 173-806-185 Purpose of this part and adoption by reference. This part contains rules for agency compliance with SEPA, including rules for charging fees under the SEPA process, designating categorical exemptions that do not apply within critical areas, listing agencies with environmental expertise, selecting the lead agency, and applying these rules to current agency activities. The city/county adopts the following sections by reference:

WAC	
197-11-900	Purpose of this part.
197-11-902	Agency SEPA policies.
197-11-916	Application to ongoing actions.
197-11-920	Agencies with environmental expertise.
197-11-922	Lead agency rules.
197-11-924	Determining the lead agency.
197-11-926	Lead agency for governmental proposals.
197-11-928	Lead agency for public and private proposals.
197-11-930	Lead agency for private projects with one agency with jurisdiction.
197-11-932	Lead agency for private projects requiring licenses from more than one agency, when one of the agencies is a county/city.
197-11-934	Lead agency for private projects requiring licenses from a local agency, not a county/city, and one or more state agencies.
197-11-936	Lead agency for private projects requiring licenses from more than one state agency.
197-11-938	Lead agencies for specific proposals.
197-11-940	Transfer of lead agency status to a state agency.
197-11-942	Agreements on lead agency status.
197-11-944	Agreements on division of lead agency duties.
197-11-946	DOE resolution of lead agency disputes.
197-11-948	Assumption of lead agency status.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-185, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-185, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-190 Critical areas. *(Optional.)* (1) The city/county has selected certain categorical exemptions that will not apply in one or more critical areas identified in the critical areas ordinances required under RCW 36.70A.060. For each critical area listed below, the exemptions within WAC 197-11-800 that are inapplicable for that area are:

(a) ...(list each critical area and exemptions that do not apply within that critical area; exemptions that do not apply can be chosen from the list in WAC 197-11-908)...

(b) ...

(2) The scope of environmental review of actions within these areas shall be limited to:

(a) Documenting whether the proposal is consistent with the requirements of the critical areas ordinance; and

(b) Evaluating potentially significant impacts on the critical area resources not adequately addressed by GMA planning documents and development regulations, if any, including any additional mitigation measures needed to protect the critical areas in order to achieve consistency with SEPA and with other applicable environmental review laws.

(3) All categorical exemptions not listed in subsection (1) of this section apply whether or not the proposal will be located in a critical area.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-190, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-190, filed 6/15/84. Formerly WAC 173-805-050.]

WAC 173-806-200 Fees. *(This entire section is optional. You may use any or none of subsections (1), (2) or (4) of this section but you must use subsection (3) of this section if other subsections are used.)* The city/county shall require the following fees for its activities in accordance with the provisions of this ordinance:

(1) Threshold determination. For every environmental checklist the city/county will review when it is lead agency, the city/county shall collect a fee of *($50.00 or enter a different amount)* ... from the proponent of the proposal prior to undertaking the threshold determination. The time periods provided by this ordinance for making a threshold determination shall not begin to run until payment of the fee. *(Note: The following option may be added:* When the city/county completes the environmental checklist at the applicant's request or under WAC 173-806-090(3) of this ordinance, an additional ... shall be collected.)

(2) Environmental impact statement.

(a) When the city/county is the lead agency for a proposal requiring an EIS and the responsible official determines that the EIS shall be prepared by employees of the city/county, the city/county may charge and collect a reasonable fee from any applicant to cover costs incurred by the city/county in preparing the EIS. The responsible official shall advise the applicant(s) of the projected costs for the EIS prior to actual preparation; the applicant shall post bond or otherwise ensure payment of such costs.

(b) The responsible official may determine that the city/county will contract directly with a consultant for preparation of an EIS, or a portion of the EIS, for activities initiated by some persons or entity other than the city/county and may bill such costs and expenses directly to the applicant. The city/county may require the applicant to post bond or otherwise ensure payment of such costs. Such consultants shall be selected by mutual agreement of the city/county and applicant after a call for proposals.

(c) If a proposal is modified so that an EIS is no longer required, the responsible official shall refund any fees collected under (a) or (b) of this subsection which remain after incurred costs are paid.

(3) The city/county may collect a reasonable fee from an applicant to cover the cost of meeting the public notice requirements of this ordinance relating to the applicant's proposal.

(4) The city/county shall not collect a fee for performing its duties as a consulted agency.

(5) The city/county may charge any person for copies of any document prepared under this ordinance, and for mailing the document, in a manner provided by chapter 42.17 RCW.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-200, filed 6/15/84. Formerly WAC 173-805-130.]

WAC 173-806-205 Effective date. (Optional.) The effective date of this ordinance is ...

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-205, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-220 Severability. If any provision of this ordinance or its application to any person or circumstance is held invalid, the remainder of this ordinance, or the application of the provision to other persons or circumstances, shall not be affected.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-220, filed 6/15/84. Formerly WAC 173-805-140.]

PART ELEVEN
FORMS

WAC 173-806-230 Adoption by reference. The city/county adopts the following forms and sections by reference:

WAC	
197-11-960	Environmental checklist.
197-11-965	Adoption notice.
197-11-970	Determination of nonsignificance (DNS).
197-11-980	Determination of significance and scoping notice (DS).
197-11-985	Notice of assumption of lead agency status.
197-11-990	Notice of action.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-230, filed 6/15/84. Formerly WAC 173-805-020.]