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

173-303-275	Transfer facilities (or collection facilities). [Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-275, filed 2/10/82.] Repealed by 84-14-031 (Order DE 84-22), filed 6/27/84. Statutory Authority: Chapter 70.105 RCW.
173-303-284	Notice of intent. [Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-284, filed 3/11/88.] Repealed by 88-18-083 (Order 88-29), filed 9/6/88. Statutory Authority: Chapter 70.105 RCW.
173-303-285	Location standards. [Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-285, filed 3/11/88.] Repealed by 88-18-083 (Order 88-29), filed 9/6/88. Statutory Authority: Chapter 70.105 RCW.
173-303-286	Performance standards. [Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-286, filed 3/11/88.] Repealed by 88-18-083 (Order 88-29), filed 9/6/88. Statutory Authority: Chapter 70.105 RCW.
173-303-420	Siting standards. [Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-420, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-420, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-420, filed 6/26/87. Statutory Authority: RCW 70.105.200 through 70.105.270. 87-03-014 (Order 86-37), § 173-303-420, filed 1/13/87. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-420, filed 4/18/84.] Repealed by 90-20-016, filed 9/21/90, effective 10/22/90. Statutory Authority: RCW 43.21A.080 and 70.105.210, et seq.
173-303-901	Response to requests for public records. [Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-901, filed 3/11/88.] Repealed by 88-18-083 (Order 88-29), filed 9/6/88. Statutory Authority: Chapter 70.105 RCW.

WAC 173-303-010 Purpose. This regulation implements chapter 70.105 RCW, the Hazardous Waste Management Act of 1976 as amended, and implements, in part, chapters 70.105A, 70.105D, and 15.54 RCW, and Subtitle C of Public Law 94-580, the Resource Conservation and Recovery Act, which the legislature has empowered the department to implement. The purposes of this regulation are to:

(1) Designate those solid wastes which are dangerous or extremely hazardous to the public health and environment;

Note: The terms public health and human health are used in this chapter interchangeably.

(2) Provide for surveillance and monitoring of dangerous and extremely hazardous wastes until they are detoxified, reclaimed, neutralized, or disposed of safely;

- (3) Provide the form and rules necessary to establish a system for manifesting, tracking, reporting, monitoring, recordkeeping, sampling, and labeling dangerous and extremely hazardous wastes;
- (4) Establish the siting, design, operation, closure, postclosure, financial, and monitoring requirements for dangerous and extremely hazardous waste transfer, treatment, storage, and disposal facilities;
- (5) Establish design, operation, and monitoring requirements for managing the state's extremely hazardous waste disposal facility;
- (6) Establish and administer a program for permitting dangerous and extremely hazardous waste management facilities; and
- (7) Encourage recycling, reuse, reclamation, and recovery to the maximum extent possible.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-010, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-010, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-010, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-010, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-010, filed 2/10/82. Formerly WAC 173-302-010.]

## WAC 173-303-016 Identifying solid waste. (1) Purpose and applicability.

- (a) The purpose of this section is to identify those materials that are and are not solid wastes.
- (b)(i) The definition of solid waste contained in this section applies only to wastes that also are dangerous for purposes of the regulations implementing chapter 70.105 RCW. For example, it does not apply to materials (such as nondangerous scrap, paper, textiles, or rubber) that are not otherwise dangerous wastes and that are recycled.
- (ii) This section identifies only some of the materials which are solid wastes and dangerous wastes under chapter 70.105 RCW. A material which is not defined as a solid waste in this section, or is not a dangerous waste identified or listed in this section, is still a solid waste and a dangerous waste for purposes of these sections if reason and authority exists under chapter 70.105 RCW and WAC 173-303-960. Within the constraints of chapter 70.105 RCW, this includes but is not limited to any material that: Is accumulated, used, reused, or handled in a manner that poses a threat to public health or the environment; or, due to the dangerous constituent(s) in it, when used or reused would pose a threat to public health or the environment.
- (c) Certain materials are solid wastes but are excluded from the requirements of this chapter by WAC 173-303-071 and 173-303-073.
- (2) The following terms are used and have the meanings as defined in WAC 173-303-040:
  - (a) Boiler
  - (b) By-product
  - (c) Incinerator
  - (d) Industrial furnace
  - (e) Reclaim
  - (f) Recover
  - (g) Recycle
  - (h) Used or reused (see reuse or use)
  - (i) Sludge

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- (i) Scrap metal
- (k) Spent material
- (1) Excluded scrap metal
- (m) Processed scrap metal
- (n) Home scrap metal
- (o) Prompt scrap metal
- (3) Definition of solid waste.
- (a) A solid waste is any discarded material that is not excluded by WAC 173-303-017(2) or that is not excluded by variance granted under WAC 173-303-017(5).
  - (b) A discarded material is any material that is:
- (i) Abandoned, as explained in subsection (4) of this section; or
- (ii) Recycled, as explained in subsection (5) of this section; or
- (iii) Considered inherently waste-like, as explained in subsection (6) of this section. Persons registering micronutrient or waste-derived fertilizers under chapter 15.54 RCW must submit information required by the department to indicate compliance with this chapter. The required minimum information is described in WAC 173-303-505; or
- (iv) A military munition identified as a solid waste at WAC 173-303-578(2).
- (4) Materials are solid waste if they are abandoned by being:
  - (a) Disposed of; or
  - (b) Burned or incinerated; or
- (c) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.
- (5) Materials are solid wastes if they are recycled—or accumulated, stored, or treated before recycling—as specified in (a) through (d) of this subsection.
- (a) Used in a manner constituting disposal. Materials noted with a "\*" in column 1 of Table 1 are solid wastes when they are:
- (i)(A) Applied to or placed on the land in a manner that constitutes disposal; or
- (B) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).
- (ii) However, commercial chemical products listed in WAC 173-303-9903 or which exhibit any of the criteria or characteristics listed in WAC 173-303-090 or 173-303-100 are not solid wastes if they are applied to the land and that is their ordinary manner of use.
- (b) Burning for energy recovery. Materials noted with a "\*" in column 2 of Table 1 are solid wastes when they are:
  - (i) Burned to recover energy;
- (ii) Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste).

However, commercial chemical products listed in WAC 173-303-9903 or which exhibit any of the criteria or characteristics listed in WAC 173-303-090 or 173-303-100 are not solid wastes if they are themselves fuels.

- (c) Reclaimed. Materials noted with a "\*" in column 3 of Table 1 are solid wastes when reclaimed.
- (d)(i) Accumulated speculatively. Materials noted with a "\*" in column 4 of Table 1 are solid wastes when accumulated speculatively.

(ii) A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that—during the calendar year (commencing on January 1)—the amount of material that is recycled, or transferred to a different site for recycling, equals at least seventy-five percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the seventy-five percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under WAC 173-303-071 (3)(n) are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

TABLE 1 Use Energy constituting Speculative recovery/ Reclamation accumulation disposal fuel WAC WAC WAC WAC 173-303-173-303-173-303-173-303-016(5)(c)016(5)(a)016(5)(b)016(5)(d)Spent materials (\*) (\*) (\*) (\*) Commercial chemical products (\*) (\*) By-products listed in WAC 173-303-9904 (\*) (\*) (\*) Sludges listed in WAC 173-303-9904 (\*) (\*) (\*) By-products exhibiting a characteristic1 (\*) or criteria2 (\*) Sludges exhibiting a characteristic1 or criteria2 Scrap metal other (\*) than excluded scrap metal (see WAC 173-303-016(2)(1))

Note:

The terms "spent materials," "sludges," "by-products," "scrap metal" and "processed scrap metal" are defined in WAC 173-303-040

- The characteristics of dangerous waste are described in WAC 173-303-090.
- The dangerous waste criteria are described in WAC 173-303-100.
- (6) Inherently waste-like materials. The following materials are solid wastes when they are recycled in any manner:
- (a) Dangerous Waste Nos. F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028.
- (b) Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a dangerous waste or are listed as a dangerous waste as defined in WAC 173-303-090 or 173-303-080 through 173-303-082, except for brominated material that meets the following criteria:

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- (i) The material must contain a bromine concentration of at least 45%; and
- (ii) The material must contain less than a total of 1% of toxic organic compounds listed in WAC 173-303-9905; and
- (iii) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping).
- (c) The department will use the following criteria to add wastes to (a) of this subsection:
- (i)(A) The materials are ordinarily disposed of, burned, or incinerated; or
- (B) The materials contain toxic constituents listed in WAC 173-303-9905 and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and
- (ii) The material may pose a substantial hazard to human health or the environment when recycled.
- (7) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing chapter 70.105 RCW who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-016, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-016, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-016, filed 12/8/93, effective 11/8/94. 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), § 173-303-016, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-016, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-016, filed 6/27/84.]

WAC 173-303-017 Recycling processes involving solid waste. (1) The purpose of this section is to identify those materials that are and are not solid wastes when recycled. Certain materials, as described in subsection (2) of this section, would not typically be considered to involve waste management and are exempt from the requirements of this chapter. All recycling processes not exempted by subsection (2) of this section are subject to the recycling requirements of WAC 173-303-120.

- (2) General categories of materials that are not solid waste when recycled.
- (a) Except as provided in subsection (3) of this section, materials are not solid wastes when they can be shown to be recycled by being:
- (i) Used or reused as ingredients in an industrial process to make a product provided the materials are not being reclaimed; or
- (ii) Used or reused as effective substitutes for commercial products; or

- (iii) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials must be managed such that there is no placement on the land.
- (b) Except as provided in subsection (3) of this section, the department has determined that the following materials when used as described are not solid wastes:
- (i) Pulping liquors (e.g., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process;
- (ii) Spent pickle liquor which is reused in wastewater treatment at a facility holding a national pollutant discharge elimination system (NPDES) permit, or which is being accumulated, stored, or treated before such reuse;
- (iii) Spent sulfuric acid used to produce virgin sulfuric acid.
- (3) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (as described in subsection (2)(a) of this section):
- (a) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or
- (b) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or
- (c) Materials accumulated speculatively as defined in WAC 173-303-016 (5)(d)(ii); or
  - (d) Materials listed in WAC 173-303-016(6); or
- (e) Any materials that the department determines are being accumulated, used, reused or handled in a manner that poses a threat to public health or the environment.
- (4) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing chapter 70.105 RCW who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.
  - (5) Variances from classification as a solid waste.
- (a) In accordance with the standards and criteria in (b) of this subsection and the procedures in subsection (7) of this section, the department may determine on a case-by-case basis that the following recycled materials are not solid wastes:
- (i) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in WAC 173-303-016 (5)(d)(ii));
- (ii) Materials that are reclaimed and then reused within the original production process in which they were generated;
- (iii) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered;

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- (iv) State-only dangerous materials (not regulated as hazardous wastes (defined in WAC 173-303-040) by EPA) which serve as an effective substitute for a commercial product or raw material.
- (b) Standards and criteria for variances from classification as a solid waste.
- (i) The department may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The department's decision will be based on the following criteria:
- (A) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);
- (B) The reason that the applicant has accumulated the material for one or more years without recycling seventy-five percent of the volume accumulated at the beginning of the year;
- (C) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;
- (D) The extent to which the material is handled to minimize loss;
  - (E) Other relevant factors.
- (ii) The department may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:
- (A) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;
- (B) The extent to which the material is handled before reclamation to minimize loss;
- (C) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;
- (D) The location of the reclamation operation in relation to the production process;
- (E) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;
- (F) Whether the person who generates the material also reclaims it:
  - (G) Other relevant factors.
- (iii) The department may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:

- (A) The degree of processing the material has undergone and the degree of further processing that is required;
  - (B) The value of the material after it has been reclaimed;
- (C) The degree to which the reclaimed material is like an analogous raw material;
- (D) The extent to which an end market for the reclaimed material is guaranteed;
- (E) The extent to which the reclaimed material is handled to minimize loss;
  - (F) Other relevant factors.
- (iv) The department may grant requests for a variance from classifying as a solid waste those materials that serve as an effective substitute for a commercial product or raw material, when such material is not regulated as hazardous waste (defined in WAC 173-303-040) by EPA, if the materials are recycled in a manner such that they more closely resemble products or raw materials rather than wastes. This determination will be based on the following factors:
  - (A) The effectiveness of the material for the claimed use;
- (B) The degree to which the material is like an analogous raw material or product;
- (C) The extent to which the material is handled to minimize loss or escape to the environment;
- (D) The extent to which an end market for the reclaimed material is guaranteed;
- (E) The time period between generating the material and its recycling;
  - (F) Other factors as appropriate.
  - (6) Variance to be classified as a boiler.

In accordance with the standards and criteria in WAC 173-303-040 (definition of "boiler"), and the procedures in subsection (7) of this section, the department may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in WAC 173-303-040, after considering the following criteria:

- (a) The extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and
- (b) The extent to which the combustion chamber and energy recovery equipment are of integral design; and
- (c) The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel; and
  - (d) The extent to which exported energy is utilized; and
- (e) The extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids, or heated gases; and
  - (f) Other factors, as appropriate.
- (7) Procedures for variances from classification as a solid waste or to be classified as a boiler.

The department will use the following procedures in evaluating applications for variances from classification as a solid waste or applications to classify particular enclosed controlled flame combustion devices as boilers:

- (a) The applicant must apply to the department for the variance. The application must address the relevant criteria contained in subsections (5)(b) or (6) of this section.
- (b) The department will evaluate the application and issue a draft public notice tentatively granting or denying the application. Notification of this tentative decision will be pro-

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vided by newspaper advertisement and radio broadcast in the locality where the recycler is located. The department will accept comment on the tentative decision for thirty days, and may also hold a public hearing upon request or at its discretion. The department will issue a final decision after receipt of comments and after the hearing (if any).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-017, filed 6/30/09, effective 7/31/09; 98-03-018 (Order 97-03), § 173-303-017, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-017, 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), § 173-303-017, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-017, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-017, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-017, filed 6/27/84.]

WAC 173-303-020 Applicability. Except as expressly provided elsewhere herein, this chapter 173-303 WAC applies to all persons who handle dangerous wastes and solid wastes that may designate as dangerous wastes including, but not limited to:

- (1) Generators;
- (2) Transporters;
- (3) Owners and operators of dangerous waste recycling, transfer, storage, treatment, and disposal facilities; and
- (4) The operator of the state's extremely hazardous waste management facility.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-020, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-020, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-020, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-020, filed 2/10/82. Formerly WAC 173-302-020.]

## **WAC 173-303-030 Abbreviations.** The following abbreviations are used in this regulation.

APTI - Association for Preservation Technology International

ASTM - American Society for Testing Materials

APHA - American Public Health Association

CAMU - corrective action management unit

CDC - Center for Disease Control

CFR - Code of Federal Regulations

DOT - Department of Transportation

°C - degrees Celsius

DRE - destruction and removal efficiency

DW - dangerous waste

DWS - drinking water standards of the Safe Drinking Water Act

EHW - extremely hazardous waste

EP - extraction procedure

EPA - Environmental Protection Agency

°F - degrees Fahrenheit

g - gram

IARC - International Agency for Research on Cancer

IFC - International Fire Code

kg - kilogram (one thousand grams)

L - liter

lb - pound

LC<sub>50</sub> - median lethal concentration

LD<sub>50</sub> - median lethal dose

MACT - maximum achievable control technology

M - molar (gram molecular weights per liter of solution)

mg - milligram (one thousandth of a gram)

NFPA - National Fire Protection Association

NIOSH - National Institute for Occupational Safety and Health

pH - negative logarithm of the hydrogen ion concentration

PODC - principal organic dangerous constituent

POTW - publicly owned treatment works

ppm - parts per million (weight/weight)

RCRA - Resource Conservation and Recovery Act

RCW - Revised Code of Washington

TEQ - toxicity equivalence

TSD facility - treatment, storage, or disposal facility

TU - temporary unit

UBC - Uniform Building Code

UFC - Uniform Fire Code

USCG - United States Coast Guard

USGS - United States Geological Survey

WAC - Washington Administrative Code

% - percent

# - number

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-030, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-030, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-030, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-030, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-030, filed 2/10/82. Formerly WAC 173-302-030,

WAC 173-303-040 **Definitions.** When used in this chapter, the following terms have the meanings given below.

"Aboveground tank" means a device meeting the definition of "tank" in this section and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

"Active life" of a facility means the period from the initial receipt of dangerous waste at the facility until the department receives certification of final closure.

"Active portion" means that portion of a facility which is not a closed portion, and where dangerous waste recycling, reuse, reclamation, transfer, treatment, storage or disposal operations are being or have been conducted after:

The effective date of the waste's designation by 40 CFR Part 261; and

March 10, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261. (See also "closed portion" and "inactive portion.")

"Active range" means a military range that is currently in service and is being regularly used for range activities.

"Acute hazardous waste" means dangerous waste sources (listed in WAC 173-303-9904) F020, F021, F022, F023, F026, or F027, and discarded chemical products (listed in WAC 173-303-9903) that are identified with a dangerous waste number beginning with a "P", including those wastes

mixed with source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954. The abbreviation "AHW" will be used in this chapter to refer to those dangerous and mixed wastes which are acute hazardous wastes. Note - the terms acute and acutely are used interchangeably.

"Ampule" means an airtight vial made of glass, plastic, metal, or any combination of these materials.

"Ancillary equipment" means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of dangerous waste from its point of generation to a storage or treatment tank(s), between dangerous waste storage and treatment tanks to a point of disposal on-site, or to a point of shipment for disposal off-site.

"Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

"Batch" means any waste which is generated less frequently than once a month.

"Battery" means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

"Berm" means the shoulder of a dike.

"Boiler" means an enclosed device using controlled flame combustion and having the following characteristics:

The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

The unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: Process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

While in operation, the unit must maintain a thermal energy recovery efficiency of at least sixty percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

The unit must export and utilize at least seventy-five percent of the recovered energy, calculated on an annual basis. In this calculation, no credit will be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

The unit is one which the department has determined, on a case-by-case basis, to be a boiler, after considering the standards in WAC 173-303-017(6).

"By-product" means a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a coproduct that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

"Carbon regeneration unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.

"Carcinogenic" means a material known to contain a substance which has sufficient or limited evidence as a human or animal carcinogen as listed in both IARC and either IRIS or HEAST.

"Cathode ray tube" or "CRT" means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.

"Chemical agents and chemical munitions" are defined as in 50 U.S.C. section 1521 (j)(1).

"Cleanup-only facility" means a site, including any contiguous property owned or under the control of the owner or operator of the site, where the owner or operator is or will be treating, storing, or disposing of remediation waste, including dangerous remediation waste, and is not, has not and will not be treating, storing or disposing of dangerous waste that is not remediation waste. A cleanup-only facility is not a "facility" for purposes of corrective action under WAC 173-303-646.

"Closed portion" means that portion of a facility which an owner or operator has closed, in accordance with the approved facility closure plan and all applicable closure requirements.

"Closure" means:

- The requirements placed upon all recycling, used oil, and TSD facilities, plus some generators, and some transporters to ensure that all such facilities are closed in an acceptable manner (see also "post-closure"); and
- Once taken out of service, the proper cleaning up and/or decontaminating of a dangerous waste management unit or a recycling unit and any areas affected by releases from the unit.

"Commercial chemical product or manufacturing chemical intermediate" refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient.

"Commercial fertilizer" means any substance containing one or more recognized plant nutrients and which is used for its plant nutrient content and/or which is designated for use or claimed to have value in promoting plant growth, and includes, but is not limited to, limes, gypsum, and manipulated animal manures and vegetable compost. The commercial fertilizer must be registered with the state or local agency

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regulating the fertilizer in the locale in which the fertilizer is being sold or applied.

"Compliance procedure" means any proceedings instituted pursuant to the Hazardous Waste Management Act, chapter 70.105 RCW, and Hazardous waste fees, chapter 70.105A RCW, or regulations issued under authority of state law, which seeks to require compliance, or which is in the nature of an enforcement action or an action to cure a violation. A compliance procedure includes a notice of intention to terminate a permit pursuant to WAC 173-303-830(5), or an application in the state superior court for appropriate relief under the Hazardous Waste Management Act. A compliance procedure is considered to be pending from the time a notice of violation or of intent to terminate a permit is issued or judicial proceedings are begun, until the department notifies the owner or operator in writing that the violation has been corrected or that the procedure has been withdrawn or discontinued

"Component" means either the tank or ancillary equipment of a tank system.

"Constituent" or "dangerous waste constituent" means a chemically distinct component of a dangerous waste stream or mixture.

"Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

"Containment building" means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of WAC 173-303-695.

"Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of dangerous waste or dangerous waste constituents which could threaten human health or environment.

"Contract" means the written agreement signed by the department and the state operator.

"Corrosion expert" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

"CRT collector" means a person who receives CRTs for recycling, repair, resale, or donation.

"CRT glass manufacturer" means an operation or part of an operation that uses a furnace to manufacture CRT glass.

"CRT processing" means conducting all of the following activities:

- Receiving broken or intact CRTs; and
- Intentionally breaking intact CRTs or further breaking or separating broken CRTs; and
- Sorting or otherwise managing glass removed from CRT monitors.

"Dangerous waste constituents" means those constituents listed in WAC 173-303-9905 and any other constituents

that have caused a waste to be a dangerous waste under this chapter.

"Dangerous waste management unit" is a contiguous area of land on or in which dangerous waste is placed, or the largest area in which there is a significant likelihood of mixing dangerous waste constituents in the same area. Examples of dangerous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

"Dangerous wastes" means those solid wastes designated in WAC 173-303-070 through 173-303-100 as dangerous, or extremely hazardous or mixed waste. As used in this chapter, the words "dangerous waste" will refer to the full universe of wastes regulated by this chapter. The abbreviation "DW" will refer only to that part of the regulated universe which is not extremely hazardous waste. (See also "extremely hazardous waste," "hazardous waste," and "mixed waste" definitions.)

"Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: Any material for which a specific treatment standard is provided in 40 CFR Part 268 Subpart D (incorporated by reference in WAC 173-303-140 (2)(a)); process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least seventy-five percent of their original volume. A mixture of debris that has not been treated to the standards provided by 40 CFR 268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

"Department" means the department of ecology.

"Dermal Rabbit  $LD_{50}$ " means the single dosage in milligrams per kilogram (mg/kg) body weight which, when dermally (skin) applied for 24 hours, within 14 days kills half of a group of ten rabbits each weighing between 2.0 and 3.0 kilograms.

"Designated facility" means:

- A dangerous waste treatment, storage, disposal, or recycling facility that:
- Has received a permit (or interim status) in accordance with the requirements of this chapter,
- Has received a permit (or interim status) from another state authorized in accordance with 40 CFR Part 271,
- Has received a permit (or interim status) from EPA in accordance with 40 CFR Part 270,
- Has a permit by rule under WAC 173-303-802(5), or is regulated under WAC 173-303-120 (4)(c) or 173-303-525 when the dangerous waste is to be recycled, and
- That has been designated on the manifest pursuant to WAC 173-303-180(1).
- "Designated facility" also means a generator site designated on the manifest to receive its waste as a return shipment from a facility that has rejected the waste in accordance with WAC 173-303-370 (5)(f).

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- If a waste is destined to a facility in an authorized state that has not yet obtained authorization to regulate that particular waste as dangerous, then the designated facility must be a facility allowed by the receiving state to accept such waste.
- The following are designated facilities only for receipt of state-only waste; they cannot receive federal hazardous waste from off-site: Facilities operating under WAC 173-303-500 (2)(c).

"Designation" is the process of determining whether a waste is regulated under the dangerous waste lists, WAC 173-303-080 through 173-303-082; or characteristics, WAC 173-303-090; or criteria, WAC 173-303-100. The procedures for designating wastes are in WAC 173-303-070. A waste that has been designated as a dangerous waste may be either DW or EHW.

"Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in WAC 173-303-573 (9)(a), (b) and (c) and 173-303-573 (20)(a), (b) and (c). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

"Dike" means an embankment or ridge of natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other substances.

"Dioxins and furans (D/F)" means tetra, penta, hexa, hepta, and octa-chlorinated dibenzo dioxins and furans.

"Director" means the director of the department of ecology or his designee.

"Discharge" or "dangerous waste discharge" means the accidental or intentional release of hazardous substances, dangerous waste or dangerous waste constituents such that the substance, waste or a waste constituent may enter or be emitted into the environment.

"Disposal" means the discharging, discarding, or abandoning of dangerous wastes or the treatment, decontamination, or recycling of such wastes once they have been discarded or abandoned. This includes the discharge of any dangerous wastes into or on any land, air, or water.

"Domestic sewage" means untreated sanitary wastes that pass through a sewer system to a publicly owned treatment works (POTW) for treatment.

"Draft permit" means a document prepared under WAC 173-303-840 indicating the department's tentative decision to issue or deny, modify, revoke and reissue, or terminate a permit. A notice of intent to terminate or deny a permit are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination as discussed in WAC 173-303-830 is not a draft permit.

"Drip pad" is an engineered structure consisting of a curbed, free-draining base, constructed of nonearthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water runon to an associated collection system at wood preserving plants.

"Elementary neutralization unit" means a device which:

Is used for neutralizing wastes which are dangerous wastes only because they exhibit the corrosivity characteristics defined in WAC 173-303-090 or are listed in WAC 173-303-081, or in 173-303-082 only for this reason; and

Meets the definition of tank, tank system, container, transport vehicle, or vessel.

"Enforceable document" means an order, consent decree, plan or other document that meets the requirements of 40 CFR 271.16(e) and is issued by the director to apply alternative requirements for closure, post-closure, groundwater monitoring, corrective action or financial assurance under WAC 173-303-610 (1)(d), 173-303-645 (1)(e), or 173-303-620 (8)(d) or, as incorporated by reference at WAC 173-303-400, 40 CFR 265.90(f), 265.110(d), or 265.140(d). Enforceable documents include, but are not limited to, closure plans and post-closure plans, permits issued under chapter 70.105 RCW, orders issued under chapter 70.105D RCW.

"Environment" means any air, land, water, or groundwater

"EPA/state identification number" or "EPA/state ID#" means the number assigned by EPA or by the department of ecology to each generator, transporter, and TSD facility.

"Existing tank system" or "existing component" means a tank system or component that is used for the storage or treatment of dangerous waste and that is in operation, or for which installation has commenced on or prior to February 3, 1989. Installation will be considered to have commenced if the owner or operator has 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 has begun; or

The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction of the site or installation of the tank system to be completed within a reasonable time.

"Excluded scrap metal" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.

"Existing TSD facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980, for wastes designated by 40 CFR Part 261, or August 9, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261. A facility has commenced construction if the owner or operator has obtained permits and approvals necessary under federal, state, and local statutes, regulations, and ordinances and either:

A continuous on-site, physical construction program has begun; or

The owner or operator has entered into contractual obligation, which cannot be canceled or modified without substantial loss, for physical construction of the facility to be completed within a reasonable time.

"Explosives or munitions emergency" means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency

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response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

"Explosives or munitions emergency response" means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

"Explosives or munitions emergency response specialist" means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include Department of Defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and DOD-certified civilian or contractor personnel; and other federal, state, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

"Extremely hazardous waste" means those dangerous and mixed wastes designated in WAC 173-303-100 as extremely hazardous. The abbreviation "EHW" will be used in this chapter to refer to those dangerous and mixed wastes which are extremely hazardous. (See also "dangerous waste" and "hazardous waste" definitions.)

"Facility" means:

- All contiguous land, and structures, other appurtenances, and improvements on the land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous waste. A facility may consist of several treatment, storage, or disposal operational units (for example, one or more landfills, surface impoundments, or combination of them). Unless otherwise specified in this chapter, the terms "facility," "treatment, storage, disposal facility," "TSD facility," "dangerous waste facility" or "waste management facility" are used interchangeably.
- For purposes of implementing corrective action under WAC 173-303-64620 or 173-303-64630, "facility" also means all contiguous property under the control of an owner or operator seeking a permit under chapter 70.105 RCW or chapter 173-303 WAC and includes the definition of facility at RCW 70.105D.020(4).

"Facility mailing list" means the mailing list for a facility maintained by the department in accordance with WAC 173-303-840 (3)(e)(I)(D).

"Final closure" means the closure of all dangerous waste management units at the facility in accordance with all applicable closure requirements so that dangerous waste management activities under WAC 173-303-400 and 173-303-600 through 173-303-670 are no longer conducted at the facility.

Areas only subject to generator standards WAC 173-303-170 through 173-303-230 need not be included in final closure.

"Fish LC50" means the concentration that will kill fifty percent of the exposed fish in a specified time period. For book designation, LC50 data must be derived from an exposure period greater than or equal to twenty-four hours. A hierarchy of species LC50 data should be used that includes (in decreasing order of preference) salmonids, fathead minnows (Pimephales promelas), and other fish species. For the ninety-six-hour static acute fish toxicity test, described in WAC 173-303-110 (3)(b)(i), coho salmon (Oncorhynchus kisutch), rainbow trout (Oncorhynchus mykiss), or brook trout (Salvelinus fontinalis) must be used.

"Food chain crops" means tobacco, crops grown for human consumption, and crops grown to feed animals whose products are consumed by humans.

"Freeboard" means the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

"Fugitive emissions" means the emission of contaminants from sources other than the control system exit point. Material handling, storage piles, doors, windows and vents are typical sources of fugitive emissions.

"Generator" means any person, by site, whose act or process produces dangerous waste or whose act first causes a dangerous waste to become subject to regulation.

"Genetic properties" means those properties which cause or significantly contribute to mutagenic, teratogenic, or carcinogenic effects in man or wildlife.

"Groundwater" means water which fills voids below the land surface and in the earth's crust.

"Halogenated organic compounds" (HOC) means any organic compounds which, as part of their composition, include one or more atoms of fluorine, chlorine, bromine, or iodine which is/are bonded directly to a carbon atom. This definition does not apply to the federal land disposal restrictions of 40 CFR Part 268 which are incorporated by reference at WAC 173-303-140 (2)(a). Note: Additional information on HOCs may be found in *Chemical Testing Methods for Designating Dangerous Waste*, Ecology Publication #97-407.

"Hazardous debris" means debris that contains a hazardous waste listed in WAC 173-303-9903 or 173-303-9904, or that exhibits a characteristic of hazardous waste identified in WAC 173-303-090.

"Hazardous substances" means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090 or 173-303-100.

"Hazardous wastes" means those solid wastes designated by 40 CFR Part 261, and regulated as hazardous and/or mixed waste by the United States EPA. This term will never be abbreviated in this chapter to avoid confusion with the abbreviations "DW" and "EHW." (See also "dangerous waste" and "extremely hazardous waste" definitions.)

"Home scrap metal" is scrap metal as generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings.

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"Ignitable waste" means a dangerous waste that exhibits the characteristic of ignitability described in WAC 173-303-090(5).

"Inactive portion" means that portion of a facility which has not recycled, treated, stored, or disposed dangerous waste after:

The effective date of the waste's designation, for wastes designated under 40 CFR Part 261; and

March 10, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261.

"Inactive range" means a military range that is not currently being used, but that is still under military control and considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities.

"Incinerator" means any enclosed device that:

Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or

Meets the definition of infrared incinerator or plasma arc incinerator.

"Incompatible waste" means a dangerous waste that is unsuitable for:

- Placement in a particular device or facility because it may cause corrosion or decay of containment materials (for example, container inner liners or tank walls); or
- Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, fumes, mists, or gases, or flammable fumes or gases.

(See appendix V of 40 CFR Parts 264 and 265 for examples.)

"Independent qualified registered professional engineer" means a person who is licensed by the state of Washington, or a state which has reciprocity with the state of Washington as defined in RCW 18.43.100, and who is not an employee of the owner or operator of the facility for which construction or modification certification is required. A qualified professional engineer is an engineer with expertise in the specific area for which a certification is given.

"Industrial-furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy: Cement kilns; lime kilns; aggregate kilns; phosphate kilns; blast furnaces; smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters and foundry furnaces); titanium dioxide chloride process oxidation reactors; coke ovens; methane reforming furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; pulping liquor recovery furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; and halogen acid furnaces (HAFs) for the production of acid from halogenated dangerous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing process. and, except for dangerous waste burned as fuel, dangerous waste fed to the furnace has a minimum halogen content of 20% as-generated. The department may decide to add devices to this list on the basis of one or more of the following factors:

The device is designed and used primarily to accomplish recovery of material products;

The device burns or reduces secondary materials as ingredients in an industrial process to make a material product:

The device burns or reduces secondary materials as effective substitutes for raw materials in processes using raw materials as principal feedstocks;

The device burns or reduces raw materials to make a material product;

The device is in common industrial use to produce a material product; and

Other factors, as appropriate.

"Infrared incinerator" means any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

"Inground tank" means a device meeting the definition of "tank" in this section whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

"Inhalation Rat  $LC_{50}$ " means a concentration in milligrams of substance per liter of air (mg/L) which, when administered to the respiratory tract for one hour or more, kills within fourteen days half of a group of ten rats each weighing between 200 and 300 grams.

"Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the waste or reagents used to treat the waste.

"Installation inspector" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

"Interim status permit" means a temporary permit given to TSD facilities which qualify under WAC 173-303-805.

"Knowledge" means sufficient information about a waste to reliably substitute for direct testing of the waste. To be sufficient and reliable, the "knowledge" used must provide information necessary to manage the waste in accordance with the requirements of this chapter.

Note: "Knowledge" may be used by itself or in combination with testing to designate a waste pursuant to WAC 173-303-070 (3)(c), or to obtain a detailed chemical, physical, and/or biological analysis of a waste as required in WAC 173-303-300(2).

"Lamp," also referred to as "universal waste lamp" means any type of high or low pressure bulb or tube portion of an electric lighting device that generates light through the discharge of electricity either directly or indirectly as radiant energy. Universal waste lamps include, but are not limited to, fluorescent, mercury vapor, metal halide, high-pressure sodium and neon. As a reference, it may be assumed that four, four-foot, one-inch diameter unbroken fluorescent tubes are equal to 2.2 pounds in weight.

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"Land disposal" means placement in or on the land, except in a corrective action management unit or staging pile, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

"Landfill" means a disposal facility, or part of a facility, where dangerous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, or an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

"Land treatment" means the practice of applying dangerous waste onto or incorporating dangerous waste into the soil surface so that it will degrade or decompose. If the waste will remain after the facility is closed, this practice is disposal.

"Large quantity handler of universal waste" means a universal waste handler (as defined in this section) who accumulates 11,000 pounds or more total of universal waste (batteries, mercury-containing equipment, and lamps calculated collectively) or who accumulates more than 2,200 pounds of lamps at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 11,000 pounds or more total of universal waste and/or 2,200 pounds of lamps is accumulated.

"Leachable inorganic waste" means solid dangerous waste (that is, passes the Paint Filter Test Method 9095B 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)) that is not an organic/carbonaceous waste and exhibits the toxicity characteristic (dangerous waste numbers D004 to D011, only) under WAC 173-303-090(8).

"Leachate" means any liquid, including any components suspended in the liquid, that has percolated through or drained from dangerous waste.

"Leak-detection system" means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of dangerous waste or accumulated liquid in the secondary containment structure. Such a system must employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of dangerous waste into the secondary containment structure.

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Liner" means a continuous layer of man-made or natural materials which restrict the escape of dangerous waste, dangerous waste constituents, or leachate through the sides, bottom, or berms of a surface impoundment, waste pile, or landfill.

"Major facility" means a facility or activity classified by the department as major.

"Manifest" means the shipping document EPA Form 8700-22 (including, if necessary, EPA Form 8700-22A, orig-

inated and signed by the generator or offeror in accordance with the requirements of WAC 173-303-180 (Manifest), and the applicable requirements of WAC 173-303-170 through 173-303-692.

"Manifest tracking number" means the alphanumeric identification number (a unique three letter suffix preceded by nine numerical digits), that is preprinted in Item 4 of the Manifest by a registered source.

"Manufacturing process unit" means a unit which is an integral and inseparable portion of a manufacturing operation, processing a raw material into a manufacturing intermediate or finished product, reclaiming spent materials or reconditioning components.

"Marine terminal operator" means a person engaged in the business of furnishing wharfage, dock, pier, warehouse, covered and/or open storage spaces, cranes, forklifts, bulk loading and/or unloading structures and landings in connection with a highway or rail carrier and a water carrier. A marine terminal operator includes, but is not limited to, terminals owned by states and their political subdivisions; railroads who perform port terminal services not covered by their line haul rates; common carriers who perform port terminal services; and warehousemen and stevedores who operate port terminal facilities.

"Mercury-containing equipment" means a device or part of a device (including thermostats, but excluding batteries and lamps) that contains elemental mercury integral to its function. Examples of mercury-containing equipment include thermostats, thermometers, manometers, and electrical switches.

"Micronutrient fertilizer" means a produced or imported commercial fertilizer that contains commercially valuable concentrations of micronutrients but does not contain commercially valuable concentrations of nitrogen, phosphoric acid, available phosphorous, potash, calcium, magnesium, or sulfur. Micronutrients are boron, chlorine, cobalt, copper, iron, manganese, molybdenum, sodium, and zinc.

"Military" means the Department of Defense (DOD), the Armed Services, Coast Guard, National Guard, Department of Energy (DOE), or other parties under contract or acting as an agent for the foregoing, who handle military munitions.

"Military munitions" means all ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: Confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include nonnuclear components of nuclear devices, managed under DOE's nuclear weapons program after all

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required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.

"Military range" means designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas.

"Miscellaneous unit" means a dangerous waste management unit where dangerous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 40 CFR Part 146, containment building, corrective action management unit, temporary unit, staging pile, or unit eligible for a research, development, and demonstration permit under WAC 173-303-809.

"Mixed waste" means a dangerous, extremely hazardous, or acutely hazardous waste that contains both a nonradioactive hazardous component and, as defined by 10 CFR 20.1003, source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.).

"New tank system" or "new tank component" means a tank system or component that will be used for the storage or treatment of dangerous waste and for which installation has commenced after February 3, 1989; except, however, for purposes of WAC 173-303-640 (4)(g)(ii) and 40 CFR 265.193 (g)(2) as adopted by reference in WAC 173-303-400(3), a new tank system is one for which construction commences after February 3, 1989. (See also "existing tank system.")

"New TSD facility" means a facility which began operation or for which construction commenced after November 19, 1980, for wastes designated by 40 CFR Part 261, or August 9, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261.

"NIOSH registry" means the registry of toxic effects of chemical substances which is published by the National Institute for Occupational Safety and Health.

"Nonsudden accident" or "nonsudden accidental occurrence" means an unforeseen and unexpected occurrence which takes place over time and involves continuous or repeated exposure.

"Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage which the owner or operator neither expected nor intended to occur.

"Off-specification used oil fuel" means used oil fuel that exceeds any specification level described in Table 1 in WAC 173-303-515.

"Onground tank" means a device meeting the definition of "tank" in this section and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

"On-site" means the same or geographically contiguous property which may be divided by public or private right of way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right of way. Noncontiguous properties owned by the same person but connected by a right of way which they control and to which the public does not have access, are also considered on-site property.

"Operator" means the person responsible for the overall operation of a facility. (See also "state operator.")

"Oral Rat LD<sub>50</sub>" means the single dosage in milligrams per kilogram (mg/kg) body weight, when orally administered, which, within fourteen days, kills half a group of ten or more white rats each weighing between 200 and 300 grams.

"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.

"Partial closure" means the closure of a dangerous waste management unit in accordance with the applicable closure requirements of WAC 173-303-400 and 173-303-600 through 173-303-695 at a facility that contains other active dangerous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other dangerous waste management unit, while other units of the same facility continue to operate.

"Performance track member facility" means a facility that has been accepted by EPA for membership in the National Environmental Performance Track Program and is still a member of the program. The National Environmental Performance Track Program is a voluntary, facility based program for top environmental performers. Facility members must demonstrate a good record of compliance, past success in achieving environmental goals, and commit to future specific quantified environmental goals, environmental management systems, local community outreach, and annual reporting of measurable results.

"Permit" means an authorization which allows a person to perform dangerous waste transfer, storage, treatment, or disposal operations, and which typically will include specific conditions for such facility operations. Permits must be issued by one of the following:

The department, pursuant to this chapter;

United States EPA, pursuant to 40 CFR Part 270; or

Another state authorized by EPA, pursuant to 40 CFR Part 271.

"Permit-by-rule" means a provision of this chapter stating that a facility or activity is deemed to have a dangerous waste permit if it meets the requirements of the provision.

"Persistence" means the quality of a material that retains more than half of its initial activity after one year (365 days) in either a dark anaerobic or dark aerobic environment at ambient conditions. Persistent compounds are either halogenated organic compounds (HOC) or polycyclic aromatic hydrocarbons (PAH) as defined in this section.

"Person" means an individual, trust, firm, joint stock company, federal agency, corporation (including a government corporation), partnership, association, state, municipality, commission, political subdivision of a state, or any interstate body.

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"Personnel or facility personnel" means all persons who work at, or oversee the operations of, a dangerous waste facility, and whose actions or failure to act may result in noncompliance with the requirements of WAC 173-303-400 or 173-303-280 through 173-303-395 and 173-303-600 through 173-303-695.

"Pesticide" means but is not limited to: Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, nematode, mollusk, fungus, weed, and any other form of plant or animal life, or virus (except virus on or in living man or other animal) which is normally considered to be a pest or which the department of agriculture may declare to be a pest; any substance or mixture of substances intended to be used as a plant regulator, defoliant, or desiccant; any substance or mixture of substances intended to be used as spray adjuvant; and, any other substance intended for such use as may be named by the department of agriculture by regulation. Herbicides, fungicides, insecticides, and rodenticides are pesticides for the purposes of this chapter.

"Pile" means any noncontainerized accumulation of solid, nonflowing dangerous waste that is used for treatment or storage.

"Plasma arc incinerator" means any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

"Point source" means any confined and discrete conveyance from which pollutants are or may be discharged. This term includes, but is not limited to, pipes, ditches, channels, tunnels, wells, cracks, containers, rolling stock, concentrated animal feeding operations, or watercraft, but does not include return flows from irrigated agriculture.

"Polycyclic aromatic hydrocarbons" (PAH) means those hydrocarbon molecules composed of two or more fused benzene rings. For purposes of this chapter, the PAHs of concern for designation are: Acenaphthene, acenaphthylene, fluorene, anthracene, fluoranthene, phenanthrene, benzo(a) anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, pyrene, chrysene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-c,d)pyrene, benzo(g,h,i)perylene, dibenzo [(a,e), (a,h), (a,i), and (a,1)] pyrenes, and dibenzo(a,j) acridine

"Post-closure" means the requirements placed upon disposal facilities (e.g., landfills, impoundments closed as disposal facilities, etc.) after closure to ensure their environmental safety for a number of years after closure. (See also "closure.")

"Processed scrap metal" is scrap metal that has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to, scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (that is, sorted), and fines, drosses and related materials that have been agglomerated. Note: Shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled (WAC 173-303-071 (3)(gg)).

"Prompt scrap metal" is scrap metal as generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap is also known as industrial or new scrap metal.

"Publicly owned treatment works" or "POTW" means any device or system, owned by the state or a municipality, which is used in the treatment, recycling, or reclamation of municipal sewage or liquid industrial wastes. This term includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW.

"Qualified groundwater scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and has sufficient training and experience in groundwater hydrology and related fields to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. Sufficient training and experience may be demonstrated by state registration, professional certifications, or completion of accredited university courses.

"Reactive waste" means a dangerous waste that exhibits the characteristic of reactivity described in WAC 173-303-090(7).

"Reclaim" means to process a material in order to recover useable products, or to regenerate the material. Reclamation is the process of reclaiming.

"Recover" means extract a useable material from a solid or dangerous waste through a physical, chemical, biological, or thermal process. Recovery is the process of recovering.

"Recycle" means to use, reuse, or reclaim a material.

"Recycling unit" is a contiguous area of land, structures and equipment where materials designated as dangerous waste or used oil are placed or processed in order to recover useable products or regenerate the original materials. For the purposes of this definition, "placement" does not mean "storage" when conducted within the provisions of WAC 173-303-120(4). A container, tank, or processing equipment alone does not constitute a unit; the unit includes containers, tanks or other processing equipment, their ancillary equipment and secondary containment system, and the land upon which they are placed.

"Registration number" means the number assigned by the department of ecology to a transporter who owns or leases and operates a ten-day transfer facility within Washington state

"Regulated unit" means any new or existing surface impoundment, landfill, land treatment area or waste pile that receives any dangerous waste after:

July 26, 1982, for wastes regulated by 40 CFR Part 261; October 31, 1984 for wastes designated only by this chapter and not regulated by 40 CFR Part 261; or

The date six months after a waste is newly identified by amendments to 40 CFR Part 261 or this chapter which cause the waste to be regulated.

"Release" means any intentional or unintentional spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous wastes, or dangerous constituents as defined at WAC 173-303-64610(4), into the environment and includes the abandonment or discarding of barrels, containers, and other receptacles containing dangerous wastes or

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dangerous constituents and includes the definition of release at RCW 70.105D.020(20).

"Remediation waste" means all solid and dangerous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, that are managed for implementing cleanup.

"Replacement unit" means a landfill, surface impoundment, or waste pile unit from which all or substantially all of the waste is removed, and that is subsequently reused to treat, store, or dispose of dangerous waste. "Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with an approved closure plan or EPA or state approved corrective action.

"Representative sample" means a sample which can be expected to exhibit the average properties of the sample source.

"Reuse or use" means to employ a material either:

As an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

In a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

"Runoff" means any rainwater, leachate, or other liquid which drains over land from any part of a facility.

"Run-on" means any rainwater, leachate, or other liquid which drains over land onto any part of a facility.

"Satellite accumulation area" means a location at or near any point of generation where hazardous waste is initially accumulated in containers (during routine operations) prior to consolidation at a designated ninety-day accumulation area or storage area. The 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 into the satellite containers.

"Schedule of compliance" means a schedule of remedial measures in a permit including an enforceable sequence of interim requirements leading to compliance with this chapter.

"Scrap metal" means bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

"Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility. This term does not include the treated effluent from a wastewater treatment plant.

"Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wetweight basis.

"Small quantity handler of universal waste" means a universal waste handler (as defined in this section) who does not accumulate 11,000 pounds or more total of universal waste (batteries, mercury-containing equipment, and lamps, calculated collectively) and/or who does not accumulate more than 2,200 pounds of lamps at any time.

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

"Solid waste management unit" or "SWMU" means any discernible location at a facility, as defined for the purposes of corrective action, where solid wastes have been placed at any time, irrespective of whether the location was intended for the management of solid or dangerous waste. Such locations include any area at a facility at which solid wastes, including spills, have been routinely and systematically released. Such units include regulated units as defined by chapter 173-303 WAC.

"Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both. *Sorb* means to either adsorb or absorb, or both.

"Special incinerator ash" means ash residues resulting from the operation of incineration or energy recovery facilities managing municipal solid waste from residential, commercial and industrial establishments, if the ash residues are designated as dangerous waste only by this chapter and not designated as hazardous waste by 40 CFR Part 261.

"Special waste" means any state-only dangerous waste that is solid only (nonliquid, nonaqueous, nongaseous), that is: Corrosive waste (WAC 173-303-090 (6)(b)(ii)), toxic waste that has Category D toxicity (WAC 173-303-100(5)), PCB waste (WAC 173-303-9904 under State Sources), or persistent waste that is not EHW (WAC 173-303-100(6)). Any solid waste that is regulated by the United States EPA as hazardous waste cannot be a special waste.

"Spent material" means any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

"Stabilization" and "solidification" means 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.

"Staging pile" means an accumulation of solid, nonflowing, remediation waste that is not a containment building or a corrective action management unit and that is used for temporary storage of remediation waste for implementing corrective action under WAC 173-303-646 or other clean up activities. Staging piles must be designated by the department according to the requirements of WAC 173-303-64690.

"State-only dangerous waste" means a waste designated only by this chapter, chapter 173-303 WAC, and is not regulated as a hazardous waste under 40 CFR Part 261.

"State operator" means the person responsible for the overall operation of the state's extremely hazardous waste facility on the Hanford Reservation.

"Storage" means the holding of dangerous waste for a temporary period. "Accumulation" of dangerous waste, by the generator on the site of generation, is not storage as long as the generator complies with the applicable requirements of WAC 173-303-200 and 173-303-201.

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"Sudden accident" means an unforeseen and unexpected occurrence which is not continuous or repeated in nature.

"Sump" means any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serves to collect dangerous waste for transport to dangerous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquid wastes or wastes containing free liquids. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"Tank" means a stationary device designed to contain an accumulation of dangerous waste, and which is constructed primarily of nonearthen materials to provide structural support.

"Tank system" means a dangerous waste storage or treatment tank and its associated ancillary equipment and containment system.

"Temporary unit" means a tank or container that is not an accumulation unit under WAC 173-303-200 and that is used for temporary treatment or storage of remediation waste for implementing corrective action under WAC 173-303-646 or other clean up activities.

"TEQ" means toxicity equivalence, the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.

"Thermal treatment" means the treatment of dangerous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the dangerous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge.

"Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of WAC 173-303-573 (9)(b)(ii) or (20)(b)(ii).

"TLm $_{96}$ " means the same as "Aquatic LC $_{50}$ ."

"Totally enclosed treatment facility" means a facility for treating dangerous waste which is directly connected to a production process and which prevents the release of dangerous waste or dangerous waste constituents into the environment during treatment.

"Toxic" means having the properties to cause or to significantly contribute to death, injury, or illness of man or wildlife.

"Transfer facility" means any transportation related facility including loading docks, parking areas, storage areas, buildings, piers, and other similar areas where shipments of dangerous waste are held, consolidated, or transferred within a period of ten days or less during the normal course of transportation.

"Transport vehicle" means a motor vehicle, water vessel, or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, steamship, etc.) is a separate transport vehicle.

"Transportation" means the movement of dangerous waste by air, rail, highway, or water.

"Transporter" means a person engaged in the off-site transportation of dangerous waste.

"Travel time" means the period of time necessary for a dangerous waste constituent released to the soil (either by accident or intent) to enter any on-site or off-site aquifer or water supply system.

"Treatability study" means a study in which a dangerous waste is subjected to a treatment process to determine: Whether the waste is amenable to the treatment process; what pretreatment (if any) is required; the optimal process conditions needed to achieve the desired treatment; the efficiency of a treatment process for a specific waste or wastes; or the characteristics and volumes of residuals from a particular treatment process. Also included in this definition for the purpose of the exemptions contained in WAC 173-303-071 (3)(r) and (s), are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. A "treatability study" is not a means to commercially treat or dispose of dangerous waste.

"Treatment" means the physical, chemical, or biological processing of dangerous waste to make such wastes nondangerous or less dangerous, safer for transport, amenable for energy or material resource recovery, amenable for storage, or reduced in volume, with the exception of compacting, repackaging, and sorting as allowed under WAC 173-303-400(2) and 173-303-600(3).

"Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which dangerous wastes are degraded, transformed or immobilized.

"Triple rinsing" means the cleaning of containers in accordance with the requirements of WAC 173-303-160 (2)(b), containers.

"Underground injection" means the subsurface emplacement of fluids through a bored, drilled, or driven well, or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

"Underground source of drinking water" (USDW) means an aquifer or its portion:

- Which supplies any public water system or contains a sufficient quantity of groundwater to supply a public water system; and currently supplies drinking water for human consumption or contains fewer than 10,000 mg/l total dissolved solids; and
  - Which is not an exempted aquifer.

"USDW" means underground source of drinking water.

"Underground tank" means a device meeting the definition of "tank" in this section whose entire surface area is totally below the surface of and covered by the ground.

"Unexploded ordnance (UXO)" means military munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to

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operations, installation, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

"Unfit-for-use tank system" means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating dangerous waste without posing a threat of release of dangerous waste to the environment.

"Universal waste" means any of the following dangerous wastes that are subject to the universal waste requirements of WAC 173-303-573:

Batteries as described in WAC 173-303-573(2);

Mercury-containing equipment as described in WAC 173-303-573(3); and

Lamps as described in WAC 173-303-573(5).

"Universal waste handler":

Means:

A generator (as defined in this section) of universal waste; or

The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

Does not mean:

A person who treats (except under the provisions of WAC 173-303-573 (9)(a), (b), or (c) or (20)(a), (b), or (c)) disposes of, or recycles universal waste; or

A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

"Universal waste transfer facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

"Universal waste transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

"Unsaturated zone" means the zone between the land surface and the water table.

"Uppermost aquifer" means the geological formation nearest the natural ground surface that is capable of yielding groundwater to wells or springs. It includes lower aquifers that are hydraulically interconnected with this aquifer within the facility property boundary.

"Used oil" means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities.

"Vessel" includes every description of watercraft, used or capable of being used as a means of transportation on the water.

"Waste-derived fertilizer" means a commercial fertilizer that is derived in whole or in part from solid waste as defined in chapter 70.95 or 70.105 RCW, or rules adopted thereunder, but does not include fertilizers derived from biosolids or biosolid products regulated under chapter 70.95J RCW or wastewaters regulated under chapter 90.48 RCW.

"Wastewater treatment unit" means a device that:

Is part of a wastewater treatment facility which is subject to regulation under either:

Section 402 or section 307(b) of the Federal Clean Water Act: or

Chapter 90.48 RCW, State Water Pollution Control Act, provided that the waste treated at the facility is a state-only dangerous waste; and

Handles dangerous waste in the following manner:

Receives and treats or stores an influent wastewater; or

Generates and accumulates or treats or stores a wastewater treatment sludge; and

Meets the definition of tank or tank system in this section

"Water or rail (bulk shipment)" means the bulk transportation of dangerous waste which is loaded or carried on board a vessel or railcar without containers or labels.

"Zone of engineering control" means an area under the control of the owner/operator that, upon detection of a dangerous waste release, can be readily cleaned up prior to the release of dangerous waste or dangerous constituents to groundwater or surface water.

Any terms used in this chapter which have not been defined in this section have either the same meaning as set forth in Title 40 CFR Parts 260, 264, 270, and 124 or else have their standard, technical meaning.

As used in this chapter, words in the masculine gender also include the feminine and neuter genders, words in the singular include the plural, and words in the plural include the singular.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-040, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-303-040, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-040, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-040, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-040, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-040, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-040, 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), § 173-303-040, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-040, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-040, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-040, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-040, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-040, filed 2/10/82. Formerly WAC 173-302-040.]

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

WAC 173-303-045 References to EPA's hazardous waste and permit regulations. (1) Any references in this chapter to any parts, subparts, or sections from EPA's hazardous waste regulations, including 40 CFR Parts 260 through 280 and Part 124, are in reference to those rules as they existed on July 1, 2007. Copies of the appropriate referenced federal requirements are available upon request from the department.

- (2) The following sections and any cross-reference to these sections are not incorporated or adopted by reference because they are provisions that EPA cannot delegate to states:
  - (a) 40 CFR Parts 260.1 (b)(4)-(6).
- (b) 40 CFR Parts 264.1 (d) and (f); 265.1 (c)(4); 264.149-150 and 265.149-150; 264.301(1); and 265.430.

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- (c) 40 CFR Parts 268.5 and 268.6; 268 Subpart B; 268.42(b) and 268.44 (a) through (g).
- (d) 40 CFR Parts 270.1 (c)(1)(i); 270.3; 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.
- (3) The following sections and any cross-references to these citations are not incorporated or adopted by reference: 40 CFR Parts 260.20-260.22.
- (4) Where EPA's regulations are incorporated by reference:
  - (a) "Regional administrator" means "the department."
  - (b) "Administrator" means "director."
  - (c) "Director" means "department."
  - (d) "40 CFR 260.11" means "WAC 173-303-110(3)."
- (e) These substitutions should be made as appropriate. They should not be made where noted otherwise in this chapter. They should not be made where another EPA region is referred to, where a provision cannot be delegated to the state, or where the director referred to is the director of another agency.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-045, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-045, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-045, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-045, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-045, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-045, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-045, 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), § 173-303-045, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-045, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-045, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-045, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-045, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-045, filed 2/10/82.]

WAC 173-303-050 Department of ecology cleanup authority. The department may conduct or contract for the removal of dangerous wastes or hazardous substances where there has been or is a potential for discharge or release, regardless of quantity or concentration, which could pose a threat to public health or the environment.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-050, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-050, filed 2/10/82. Formerly WAC 173-302-060.]

WAC 173-303-060 Notification and identification **numbers.** (1) Any person who generates, transports, offers for transport, or transfers a dangerous waste, or who owns or operates a dangerous waste TSD facility must have a current EPA/state identification number (EPA/state ID#). An EPA/state ID# is issued to TSD facilities and generators by site. A state registration number is assigned to transfer facilities by site. Any person who offers a dangerous waste to a transporter or to a dangerous waste TSD facility that does not have an EPA/state ID#, or whose EPA/state ID# has been cancelled or withdrawn, is in violation of this regulation.

- (2) Every person who must have an EPA/state ID#, and who has not already received their ID#, must notify the department by obtaining and completing a Washington State Dangerous Waste Site Identification Form according to the instructions on the form and submitting the completed form to the department. Any person already assigned an EPA/state ID# must notify the department of any changes to their company's name, mailing address, ownership, physical location, or type of dangerous waste activity, by submitting a revised form. A revised form must be submitted prior to adding or dropping any of the following activities: Permitted treating, storing and/or disposing, immediate recycling, transporting, permit by rule, and/or treatment by generator. Any change in site location will require the issuance of a new EPA/state ID# for waste generation and management facilities. An EPA/state ID# may not be used at new company locations. A company that has obtained an ID# as a "transporter only" can move to a new location and continue to use the same ID#. A revised Dangerous Waste Site Identification Form must be submitted to the department. A Dangerous Waste Site Identification Form and instructions for its completion may be obtained by contacting the department.
- (3) Any person with an EPA/state ID# may request that his ID# be withdrawn if he will no longer be handling dangerous waste at the site the ID# has been assigned to. Any person whose ID# has been withdrawn must notify the department before he uses the ID# at any later date. Notification must be in writing, except in the case of emergencies (e.g., fires, spills, etc.) such notification may be provided by telephone first, and followed within one week by a written notification. Withdrawal will only be granted when all applicable requirements of this chapter and chapter 173-305 WAC have been
- (4) Any person with an EPA/state ID# may request that his ID# be cancelled if he will no longer occupy the site. Notification must be in writing. An EPA/state ID# will be considered cancelled only after all applicable requirements of this chapter and chapter 173-305 WAC have been met.
- (5) Any person with a current EPA/state ID# must submit an annual report as required by WAC 173-303-070(8), 173-303-220, and 173-303-390. Any person who has withdrawn or cancelled their ID# must submit an annual report up to the effective date of cancellation or withdrawal. The generator should write the effective date on the Dangerous Waste Site Identification Form for the cancellation or withdrawal; it is the date by which all regulated waste activities (generation, transportation, and management) have ceased at the site.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-060, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-060, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-060, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-060, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-060, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-060, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-060, filed 2/10/82.]

### WAC 173-303-070 Designation of dangerous waste. (1) Purpose and applicability.

(a) This section describes the procedures for determining whether or not a solid waste is DW or EHW.

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- (b) The procedures in this section are applicable to any person who generates a solid waste (including recyclable materials) that is not exempted or excluded by this chapter or by the department. Any person who must determine whether or not their solid waste is designated must follow the procedures set forth in subsection (3) of this section. Any person who determines by these procedures that their waste is designated DW or EHW is subject to all applicable requirements of this chapter.
- (c) The requirements for the small quantity generator exemption are found in subsection (8) of this section.
- (2)(a) Except as provided at WAC 173-303-070 (2)(c), once a material has been determined to be a dangerous waste, then any solid waste generated from the recycling, treatment, storage, or disposal of that dangerous waste is a dangerous waste unless and until:
- (i) The generator has been able to accurately describe the variability or uniformity of the waste over time, and has been able to obtain demonstration samples which are representative of the waste's variability or uniformity; and
- (ii)(A) It does not exhibit any of the characteristics of WAC 173-303-090; however, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of WAC 173-303-140 (2)(a), even if they no longer exhibit a characteristic at the point of land disposal; and
- (B) If it was a listed waste under WAC 173-303-080 through 173-303-083, it also has been exempted pursuant to WAC 173-303-910(3); or
- (iii) If originally designated only through WAC 173-303-100, it does not meet any of the criteria of WAC 173-303-100.

Such solid waste will include but not be limited to any sludge, spill residue, ash emission control dust, leachate, or precipitation runoff. Precipitation runoff will not be considered a dangerous waste if it can be shown that the runoff has not been contaminated with the dangerous waste, or that the runoff is adequately addressed under existing state laws (e.g. chapter 90.48 RCW), or that the runoff does not exhibit any of the criteria or characteristics described in WAC 173-303-100.

- (b) Materials that are reclaimed from solid wastes and that are used beneficially (as provided in WAC 173-303-016 and 173-303-017) are not solid wastes and hence are not dangerous wastes under this section unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.
- (c)(i) A dangerous waste that is listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits one or more characteristics of ignitability as defined under WAC 173-303-090(5), corrosivity as defined under WAC 173-303-090(6), or reactivity as defined under WAC 173-303-090(7) is not a dangerous waste, if the waste no longer exhibits any characteristic of dangerous waste identified in WAC 173-303-090 or any criteria identified in WAC 173-303-100.
- (ii) The exclusion described in (c)(i) of this subsection also pertains to:
- (A) Any solid waste generated from treating, storing, or disposing of a dangerous waste listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits the char-

- acteristics of ignitability, corrosivity, or reactivity as regulated under (a) and (b) of this section.
- (B) Wastes excluded under this section are subject to 40 CFR Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a) (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.
  - (3) Designation procedures.
- (a) To determine whether or not a solid waste is designated as a dangerous waste a person must:
- (i) First, determine if the waste is a listed discarded chemical product, WAC 173-303-081;
- (ii) Second, determine if the waste is a listed dangerous waste source, WAC 173-303-082;
- (iii) Third, if the waste is not listed in WAC 173-303-081 or 173-303-082, or for the purposes of compliance with the federal land disposal restrictions as adopted by reference in WAC 173-303-140, determine if the waste exhibits any dangerous waste characteristics, WAC 173-303-090; and
- (iv) Fourth, if the waste is not listed in WAC 173-303-081 or 173-303-082, and does not exhibit a characteristic in WAC 173-303-090, determine if the waste meets any dangerous waste criteria, WAC 173-303-100.
- (b) A person must check each section, in the order set forth, until they determine whether the waste is designated as a dangerous waste. Once the waste is determined to be a dangerous waste, further designation is not required except as required by subsection (4) or (5) of this section. If a person has checked the waste against each section and the waste is not designated, then the waste is not subject to the requirements of chapter 173-303 WAC.

Any person who wishes to seek an exemption for a waste which has been designated DW or EHW must comply with the requirements of WAC 173-303-072.

- (c) For the purpose of determining if a solid waste is a dangerous waste as identified in WAC 173-303-080 through 173-303-100, a person must either:
- (i) Test the waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110; or
- (ii) Apply knowledge of the waste in light of the materials or the process used, when:
- (A) Such knowledge can be demonstrated to be sufficient for determining whether or not it designated and/or designated properly; and
- (B) All data and records supporting this determination in accordance with WAC 173-303-210(3) are retained on-site.
- (4) Testing required. Notwithstanding any other provisions of this chapter, the department may require any person to test a waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110 to determine whether or not the waste is designated under the dangerous waste lists, characteristics, or criteria, WAC 173-303-080 through 173-303-100. Such testing may be required if the department has reason to believe that the waste would be designated DW or EHW by the dangerous waste lists, characteristics, or criteria, or if the department has reason to believe that the waste is designated improperly (e.g., the waste has been designated DW but should actually be designated EHW). If a person, pursuant to the requirements of this subsection, determines that the waste is a dangerous waste or that its designation must be changed, then they are subject to the

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applicable requirements of this chapter 173-303 WAC. The department will base a requirement to test a waste on evidence that includes, but is not limited to:

- (a) Test information indicating that the person's waste may be DW or EHW;
- (b) Evidence that the person's waste is very similar to another persons' already designated DW or EHW;
- (c) Evidence that the persons' waste has historically been a DW or EHW;
- (d) Evidence or information about a person's manufacturing materials or processes which indicate that the wastes may be DW or EHW; or
- (e) Evidence that the knowledge or test results a person has regarding a waste is not sufficient for determining whether or not it designated and/or designated properly.
- (5) Additional designation required. A generator must manage dangerous waste under the most stringent management standards that apply. The following subsections describe how waste that has been designated as DW under the dangerous waste lists, WAC 173-303-080 through 173-303-082, or characteristics, WAC 173-303-090, or in the case of (c) of this subsection, under the lists, characteristics, or criteria, must be further designated under the dangerous waste criteria, WAC 173-303-100. This further designation under the criteria is necessary because it may change how the waste must be managed. Additional designation is required when:
- (a) The waste is designated as DW with a QEL of 220 pounds and the generator otherwise qualifies as a small quantity generator. In this case, a generator must determine if their DW is also designated as a toxic EHW, WAC 173-303-100, with a QEL of 2.2 pounds; or
- (b) The waste is designated as DW and the waste is to be discharged to a POTW operating under WAC 173-303-802(4) (Permits by rule). In this case, a generator must determine if the waste is also an EHW under WAC 173-303-100; or
- (c) The waste is designated as a state-only DW and the waste is to be:
- (i) Burned for energy recovery, as used oil, under the provisions of WAC 173-303-515; or
- (ii) Land disposed within the state. In this case, a generator must determine if the waste is also an EHW under WAC 173-303-100.
- (6) Dangerous waste numbers. When a person is reporting or keeping records on a dangerous waste, they must use all the dangerous waste numbers which they know are assignable to the waste from the dangerous waste lists, characteristics, or criteria. For example, if the waste is ignitable *and* contains more than 5 mg/l leachable lead when tested for the toxicity characteristic, they must use the dangerous waste numbers of D001 and D008. This will not be construed as requiring a person to designate their waste beyond those designation requirements set forth in subsections (2), (3), (4), and (5) of this section.
- (7) Quantity exclusion limits; aggregated waste quantities.
- (a) Quantity exclusion limits. In each of the designation sections describing the lists, characteristics, and criteria, quantity exclusion limits (QEL) are identified. The QEL are used to distinguish when a dangerous waste is only subject to the small quantity generator provisions, and when a danger-

- ous waste is subject to the full requirements of this chapter. Any solid waste which is not excluded or exempted and which is listed by or exhibits the characteristics or meets the criteria of this chapter is a dangerous waste. Small quantity generators who produce dangerous waste below the QEL are subject to the requirements described in subsection (8) of this section.
- (b) Aggregated waste quantities. A person may be generating, accumulating, or storing more than one kind of dangerous waste. In such cases, they must consider the aggregate quantity of their wastes when determining whether or not their waste amounts exceed the specific limits for waste accumulation or the specific quantity exclusion limits (QEL) for waste generation. Waste quantities must be aggregated for all wastes with common QEL's. Example: If a person generates 100 pounds of an ignitable waste and 130 pounds of a persistent waste, then both wastes are regulated because their aggregate waste quantity (230 pounds) exceeds their common QEL of 220 pounds. On the other hand, if a person generates one pound of a toxic EHW and 218 pounds of a corrosive waste, their quantities would not be aggregated because they do not share a common QEL (2.2 pounds and 220 pounds, respective QEL's). (Note: In order to remain a small quantity generator, the total quantity of dangerous waste generated in one month, all DW and EHW regardless of their QELs, must not equal or exceed 220 pounds. Not more than 2.2 pounds of a waste with a 2.2 pound QEL may be part of that total.)
- (c) When making the quantity determinations of this subsection and WAC 173-303-170 through 173-303-230, generators must include all dangerous wastes they generate, except dangerous waste that:
- (i) Is exempt from regulation under WAC 173-303-071; or
- (ii) Is recycled under WAC 173-303-120 (2)(a), (3)(c), (e), (h) or (5); or
- (iii) Is managed in accordance with WAC 173-303-802(5) immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in WAC 173-303-040; or
- (iv) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under WAC 173-303-120 (4)(a); or
- (v) Is spent lead-acid batteries managed under the requirements of WAC 173-303-120 (3)(f) and 173-303-520; or
- (vi) Is universal waste managed under WAC 173-303-077 and 173-303-573.
- (d) In determining the quantity of dangerous waste generated, a generator need not include:
- (i) Dangerous waste when it is removed from on-site storage; or
  - (ii) Reserve; or
- (iii) Spent materials that are generated, reclaimed, and subsequently reused on-site, as long as such spent materials have been counted once (Note: If after treatment or reclamation a residue is generated with a different waste code(s), that residue must be counted); or
- (iv) The container holding/containing the dangerous waste as described under WAC 173-303-160(1).

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- (8) Small quantity generators.
- (a) A person is a small quantity generator and subject to the requirements of this subsection if:
- (i) Their waste is dangerous waste under subsection (3) of this section, and the quantity of waste generated per month (or the aggregated quantity if more than one kind of waste is generated) does not equal or exceed the quantity exclusion limit (QEL) for such waste (or wastes) as described in WAC 173-303-070(7); and
- (ii) The quantity accumulated or stored does not exceed 2200 pounds for wastes with a 220 pound QEL and 2.2 pounds for waste with a 2.2 pound QEL. (Exception: The accumulation limit for the acute hazardous wastes described in WAC 173-303-081 (2)(iv) and 173-303-082 (2)(b) is 220 lbs); and
- (iii) The total quantity of dangerous waste generated in one month, all DW and EHW regardless of their QELs, does not equal or exceed 220 pounds. If a person generates any dangerous wastes that exceed the QEL or accumulates or stores waste that exceeds the accumulation limits, then all dangerous waste generated, accumulated, or stored by that person is subject to the requirements of this chapter. A small quantity generator who generates in excess of the quantity exclusion limits or, accumulates, or stores waste in excess of the accumulation limits becomes subject to the full requirements of this chapter and cannot again be a small quantity generator until after all dangerous waste on-site at the time he or she became fully regulated have been removed, treated, or disposed.

Example. If a person generates four pounds of an acute hazardous waste discarded chemical product (QEL is 2.2 pounds) and 200 pounds of an ignitable waste (QEL is 220 pounds), then both wastes are fully regulated, and the person is not a small quantity generator for either waste.

(Comment: If a generator generates acute hazardous waste in a calendar month in quantities greater than the QELs, all quantities of that acute hazardous waste are subject to full regulation under this chapter. "Full regulation" means the regulations applicable to generators of greater than 2200 pounds of dangerous wastes in a calendar month.)

- (b) Small quantity generators will not be subject to the requirements of this chapter if they:
- (i) Designate their waste in accordance with WAC 173-303-070; and
- (ii) Manage their waste in a way that does not pose a potential threat to human health or the environment; and
- (iii) Either treat or dispose of their dangerous waste in an on-site facility, or ensure delivery to an off-site facility, either of which, if located in the United States, is:
- (A) Permitted (including permit-by-rule, interim status, or final status) under WAC 173-303-800 through 173-303-840;
- (B) Authorized to manage dangerous waste by another state with a hazardous waste program approved under 40 CFR Part 271, or by EPA under 40 CFR Part 270;
- (C) Permitted to manage moderate-risk waste under chapter 173-350 WAC (Solid waste handling standards), operated in accordance with state and local regulations, and consistent with the applicable local hazardous waste plan that has been approved by the department;

- (D) A facility that beneficially uses or reuses, or legitimately recycles or reclaims the dangerous waste, or that treats the waste prior to such recycling activities;
- (E) Permitted, licensed, or registered to manage municipal solid waste and, if managed in a municipal solid waste landfill is subject to 40 CFR Part 258 or chapter 173-351 WAC:
- (F) Permitted, licensed, or registered by a state to manage nonmunicipal nonhazardous waste and, if managed in a nonmunicipal nonhazardous waste disposal unit after January 1, 1998, is subject to the requirements in 40 CFR 257.5 through 257.30;
- (G) A publicly owned treatment works (POTW): Provided, That small quantity generator(s) comply with the provisions of the domestic sewage exclusion found in WAC 173-303-071 (3)(a); or
- (H) For universal waste managed under WAC 173-303-573, a universal waste handler or destination facility subject to the requirements of WAC 173-303-573; and
- (iv) Submit an annual report in accordance with WAC 173-303-220 if they have obtained an EPA/state identification number pursuant to WAC 173-303-060.
- (c) If a small quantity generator's wastes are mixed with used oil, the mixture is subject to WAC 173-303-510 if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated if it is destined to be burned for energy recovery.
- (d) If a small quantity generator's used oil is to be recycled by being burned for energy recovery or re-refined, the used oil is subject to WAC 173-303-515.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-070, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-070, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-070, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-070, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-070, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-070, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-070, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 93-02-050 (Order 92-32), § 173-303-070, 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), § 173-303-070, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-070, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-070, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-070, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-070, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-070, filed 2/10/82.]

# WAC 173-303-071 Excluded categories of waste. (1) Purpose. Certain categories of waste have been excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, because they generally are not dangerous waste, are regulated under other state and federal programs, or are recycled in ways which do not threaten public health or the environment. WAC 173-303-071 describes these excluded categories of waste.

(2) Excluding wastes. Any persons who generate a common class of wastes and who seek to categorically exclude such class of wastes from the requirements of this chapter

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must comply with the applicable requirements of WAC 173-303-072. No waste class will be excluded if any of the wastes in the class are regulated as hazardous waste under 40 CFR Part 261.

- (3) Exclusions. The following categories of waste are excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, 173-303-145, and 173-303-960, and as otherwise specified:
  - (a)(i) Domestic sewage; and
- (ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works (POTW) for treatment provided:
- (A) The generator or owner/operator has obtained a state waste discharge permit issued by the department, a temporary permit obtained pursuant to RCW 90.48.200, or pretreatment permit (or written discharge authorization) from a local sewage utility delegated pretreatment program responsibilities pursuant to RCW 90.48.165;
- (B) The waste discharge is specifically authorized in a state waste discharge permit, pretreatment permit or written discharge authorization, or in the case of a temporary permit the waste is accurately described in the permit application;
- (C) The waste discharge is not prohibited under 40 CFR Part 403.5; and
- (D) The waste prior to mixing with domestic sewage must not exhibit dangerous waste characteristics for ignitability, corrosivity, reactivity, or toxicity as defined in WAC 173-303-090, and must not meet the dangerous waste criteria for toxic dangerous waste or persistent dangerous waste under WAC 173-303-100, unless the waste is treatable in the publicly owned treatment works (POTW) where it will be received. This exclusion does not apply to the generation, treatment, storage, recycling, or other management of dangerous wastes prior to discharge into the sanitary sewage system;
- (b) Industrial wastewater discharges that are point-source discharges subject to regulation under Section 402 of the Clean Water Act. This exclusion does not apply to the collection, storage, or treatment of industrial waste-waters prior to discharge, nor to sludges that are generated during industrial wastewater treatment. Owners or operators of certain wastewater treatment facilities managing dangerous wastes may qualify for a permit-by-rule pursuant to WAC 173-303-802(5);
- (c) Household wastes, including household waste that has been collected, transported, stored, or disposed. Wastes that are residues from or are generated by the management of household wastes (e.g., leachate, ash from burning of refuse-derived fuel) are not excluded by this provision. "Household wastes" means any waste material (including, but not limited to, garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste will not be deemed to be treating, storing, disposing of, or otherwise managing dangerous wastes for the purposes of regulation under this chapter, if such facility:
  - (i) Receives and burns only:
- (A) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and

- (B) Solid waste from commercial or industrial sources that does not contain dangerous waste; and
- (ii) Such facility does not accept dangerous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that dangerous wastes are not received at or burned in such facility;
- (d) Agricultural crops and animal manures which are returned to the soil as fertilizers;
- (e) Asphaltic materials designated only for the presence of PAHs by WAC 173-303-100(6). For the purposes of this exclusion, asphaltic materials means materials that have been used for structural and construction purposes (e.g., roads, dikes, paving) that were produced from mixtures of oil and sand, gravel, ash or similar substances;
- (f) Roofing tars and shingles, except that these wastes are not excluded if mixed with wastes listed in WAC 173-303-081 or 173-303-082, or if they exhibit any of the characteristics specified in WAC 173-303-090;
  - (g) Treated wood waste and wood products including:
- (i) Arsenical-treated wood that fails the test for the toxicity characteristic of WAC 173-303-090(8) (dangerous waste numbers D004 through D017 only) or that fails any state criteria, if the waste is generated by persons who utilize the arsenical-treated wood for the materials' intended end use. Intended end use means the wood products must have been used in typical treated wood applications (for example, fence posts, decking, poles, and timbers).
- (ii) Wood treated with other preservatives provided such treated wood and wood waste (for example, sawdust and shavings) are, within one hundred eighty days after becoming waste:
- (A) Disposed of at a landfill that is permitted in accordance with chapter 173-350 WAC, Solid waste handling standards, or chapter 173-351 WAC, criteria for municipal solid waste landfills, and provided that such wood is neither a listed waste under WAC 173-303-9903 and 173-303-9904 nor a TCLP waste under WAC 173-303-090(8); or
- (B) Sent to a facility that will legitimately treat or recycle the treated wood waste, and manage any residue in accordance with that state's dangerous waste regulations; or
- (C) Sent off-site to a permitted TSD facility or placed in an on-site facility which is permitted by the department under WAC 173-303-800 through 173-303-845. In addition, creosote-treated wood is excluded when burned for energy recovery in an industrial furnace or boiler that has an order of approval issued pursuant to RCW 70.94.152 by ecology or a local air pollution control authority to burn creosote treated wood.
  - (h) Irrigation return flows;
  - (i) Reserve;
  - (i) Mining overburden returned to the mining site;
  - (k) Polychlorinated biphenyl (PCB) wastes:
- (i) PCB wastes whose disposal is regulated by EPA under 40 CFR 761.60 (Toxic Substances Control Act) and that are dangerous either because:
- (A) They fail the test for toxicity characteristic (WAC 173-303-090(8), Dangerous waste codes D018 through D043 only); or
- (B) Because they are designated only by this chapter and not designated by 40 CFR Part 261, are exempt from regula-

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- tion under this chapter except for WAC 173-303-505 through 173-303-525, 173-303-960, those sections specified in subsection (3) of this section, and 40 CFR Part 266;
- (ii) Wastes that would be designated as dangerous waste under this chapter solely because they are listed as WPCB under WAC 173-303-9904 when such wastes are stored and disposed in a manner equivalent to the requirements of 40 CFR Part 761 Subpart D for PCB concentrations of 50 ppm or greater.
  - (1) Samples:
- (i) Except as provided in (l)(ii) of this subsection, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this chapter, when:
- (A) The sample is being transported to a lab for testing or being transported to the sample collector after testing; or
- (B) The sample is being stored by the sample collector before transport, by the laboratory before testing, or by the laboratory after testing prior to return to the sample collector; or
- (C) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action).
- (ii) In order to qualify for the exemptions in (l)(i) of this subsection, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:
- (A) Comply with United States Department of Transportation (DOT), United States Postal Service (USPS), or any other applicable shipping requirements; or
- (B) Comply with the following requirements if the sample collector determines that DOT or USPS, or other shipping requirements do not apply:
- (I) Assure that the following information accompanies the sample:
- (AA) The sample collector's name, mailing address, and telephone number:
- (BB) The laboratory's name, mailing address, and telephone number;
  - (CC) The quantity of the sample;
  - (DD) The date of shipment;
  - (EE) A description of the sample; and
- (II) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- (iii) This exemption does not apply if the laboratory determines that the waste is dangerous but the laboratory is no longer meeting any of the conditions stated in (l)(i) of this subsection;
  - (m) Reserve;
- (n) Dangerous waste generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated nonwaste-treatment-manufacturing unit until it exits the unit in which it was generated. This exclusion does not apply to surface impoundments, nor does it apply if the dangerous waste remains in the unit more than ninety days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials;

- (o) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (NAICS codes 331111 and 332111), except that these wastes are not excluded if they exhibit one or more of the dangerous waste criteria (WAC 173-303-100) or characteristics (WAC 173-303-090):
- (p) Wastes from burning any of the materials exempted from regulation by WAC 173-303-120 (2)(a)(vii) and (viii). These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics or criteria;
- (q) As of January 1, 1987, secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:
- (i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;
- (ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators):
- (iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed;
- (iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal; and
- (v) A generator complies with the requirements of chapter 173-303 WAC for any residues (e.g., sludges, filters, etc.) produced from the collection, reclamation, and reuse of the secondary materials.
  - (r) Treatability study samples.
- (i) Except as provided in (r)(ii) of this subsection, persons who generate or collect samples for the purpose of conducting treatability studies as defined in WAC 173-303-040 are not subject to the requirements of WAC 173-303-180, 173-303-190, and 173-303-200 (1)(a), nor are such samples included in the quantity determinations of WAC 173-303-070 (7) and (8) and 173-303-201 when:
- (A) The sample is being collected and prepared for transportation by the generator or sample collector; or
- (B) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or
- (C) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study; or
- (D) The sample or waste residue is being transported back to the original generator from the laboratory or testing facility.
- (ii) The exemption in (r)(i) of this subsection is applicable to samples of dangerous waste being collected and shipped for the purpose of conducting treatability studies provided that:
- (A) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with nonacute dangerous waste, 1000 kg of nonacute dangerous waste other than contaminated media, 1 kg of acutely hazardous waste, 2500 kg of media contaminated with acutely hazardous waste for each process being evaluated for each generated waste stream; and

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- (B) The mass of each sample shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with nonacute dangerous waste or may include 2500 kg of media contaminated with acute hazardous waste, 1000 kg of dangerous waste, and 1 kg of acutely hazardous waste; and
- (C) The sample must be packaged so that it will not leak, spill, or vaporize from its packaging during shipment and the requirements of (r)(ii)(C)(I) or (II) of this subsection are met.
- (I) The transportation of each sample shipment complies with United States Department of Transportation (DOT), United States Postal Service (USPS), or any other applicable shipping requirements; or
- (II) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:
- (AA) The name, mailing address, and telephone number of the originator of the sample;
- (BB) The name, address, and telephone number of the laboratory or testing facility that will perform the treatability study;
  - (CC) The quantity of the sample;
  - (DD) The date of shipment; and
- (EE) A description of the sample, including its dangerous waste number.
- (D) The sample is shipped, within ninety days of being generated or of being taken from a stream of previously generated waste, to a laboratory or testing facility which is exempt under (s) of this subsection or has an appropriate final facility permit or interim status; and
- (E) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:
  - (I) Copies of the shipping documents;
- (II) A copy of the contract with the facility conducting the treatability study;
  - (III) Documentation showing:
- (AA) The amount of waste shipped under this exemption;
- (BB) The name, address, and EPA/state identification number of the laboratory or testing facility that received the waste;
  - (CC) The date the shipment was made; and
- (DD) Whether or not unused samples and residues were returned to the generator.
- (F) The generator reports the information required under (r)(ii)(E)(III) of this subsection in its annual report.
- (iii) The department may grant requests, on a case-by-case basis, for up to an additional two years for treatability studies involving bioremediation. The department may grant requests on a case-by-case basis for quantity limits in excess of those specified in (r)(ii)(A) and (B) of this subsection and (s)(iv) of this subsection, for up to an additional 5000 kg of media contaminated with nonacute dangerous waste, 500 kg of nonacute dangerous waste, 1 kg of acute hazardous waste, and 2500 kg of media contaminated with acute hazardous waste or for up to an additional 10,000 kg of wastes regulated only by this chapter and not regulated by 40 CFR Part 261, to conduct further treatability study evaluation:
- (A) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be

considered in reviewing such requests include the nature of the technology, the type of process, (e.g., batch versus continuous), size of the unit undergoing testing (particularly in relation to scale-up considerations), the time/quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance calculations.

(B) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when:

There has been an equipment or mechanical failure during the conduct of a treatability study; there is a need to verify the results of previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

- (C) The additional quantities and time frames allowed in (r)(iii)(A) and (B) of this subsection are subject to all the provisions in (r)(i) and (r)(ii)(C) through (F) of this subsection. The generator or sample collector must apply to the department where the sample is collected and provide in writing the following information:
- (I) The reason the generator or sample collector requires additional time or quantity of sample for the treatability study evaluation and the additional time or quantity needed;
- (II) Documentation accounting for all samples of dangerous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;
- (III) A description of the technical modifications or change in specifications which will be evaluated and the expected results;
- (IV) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and
- (V) Such other information that the department considers necessary.
- (s) Samples undergoing treatability studies at laboratories and testing facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to chapter 70.105 RCW) are not subject to the requirements of this chapter, except WAC 173-303-050, 173-303-145, and 173-303-960 provided that the conditions of (s)(i) through (xiii) of this subsection are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to (s)(i) through (xiii) of this subsection. Where a group of MTUs are located at the same site, the limitations specified in (s)(i) through (xiii) of this subsection apply to the entire group of MTUs collectively as if the group were one MTU.
- (i) No less than forty-five days before conducting treatability studies the laboratory or testing facility notifies the department in writing that it intends to conduct treatability studies under this subsection.

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- (ii) The laboratory or testing facility conducting the treatability study has an EPA/state identification number.
- (iii) No more than a total of 10,000 kg of "as received" media contaminated with nonacute dangerous waste, 2500 kg of media contaminated with acute hazardous waste or 250 kg of other "as received" dangerous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.
- (iv) The quantity of "as received" dangerous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with nonacute dangerous waste, 2500 kg of media contaminated with acute hazardous waste, 1000 kg of nonacute dangerous wastes other than contaminated media, and 1 kg of acutely hazardous waste. This quantity limitation does not include treatment materials (including nondangerous solid waste) added to "as received" dangerous waste.
- (v) No more than ninety days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.
- (vi) The treatability study does not involve the placement of dangerous waste on the land or open burning of dangerous waste.
- (vii) The laboratory or testing facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:
- (A) The name, address, and EPA/state identification number of the generator or sample collector of each waste sample;
  - (B) The date the shipment was received;
  - (C) The quantity of waste accepted;
- (D) The quantity of "as received" waste in storage each day;
- (E) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;
  - (F) The date the treatability study was concluded;
- (G) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated TSD facility, the name of the TSD facility and its EPA/state identification number.
- (viii) The laboratory or testing facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.
- (ix) The laboratory or testing facility prepares and submits a report to the department by March 15 of each year that estimates the number of studies and the amount of waste

- expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:
- (A) The name, address, and EPA/state identification number of the laboratory or testing facility conducting the treatability studies;
- (B) The types (by process) of treatability studies conducted;
- (C) The names and addresses of persons for whom studies have been conducted (including their EPA/state identification numbers);
  - (D) The total quantity of waste in storage each day;
- (E) The quantity and types of waste subjected to treatability studies:
  - (F) When each treatability study was conducted;
- (G) The final disposition of residues and unused sample from each treatability study.
- (x) The laboratory or testing facility determines whether any unused sample or residues generated by the treatability study are dangerous waste under WAC 173-303-070 and if so, are subject to the requirements of this chapter, unless the residues and unused samples are returned to the sample originator under the exemption in (r) of this subsection.
- (xi) The laboratory or testing facility notifies the department by letter when it is no longer planning to conduct any treatability studies at the site.
- (xii) The date the sample was received, or if the treatability study has been completed, the date of the treatability study, is marked and clearly visible for inspection on each container.
- (xiii) While being held 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.

ote: 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.

- (t) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of WAC 173-303-090(8) (dangerous waste numbers D018 through D043 only) and are subject to the corrective action regulations under 40 CFR Part 280.
- (u) Special incinerator ash (as defined in WAC 173-303-040).
- (v) Wood ash that would designate solely for corrosivity by WAC 173-303-090 (6)(a)(iii). For the purpose of this exclusion, wood ash means ash residue and emission control dust generated from the combustion of untreated wood, wood treated solely with creosote, and untreated wood fiber materials including, but not limited to, wood chips, saw dust, tree stumps, paper, cardboard, residuals from waste fiber recycling, deinking rejects, and associated wastewater treatment solids. This exclusion allows for the use of auxiliary fuels including, but not limited to, oils, gas, coal, and other fossil fuels in the combustion process.
- (w)(i) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose;

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- (ii) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.
- (iii) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in (w)(i) and (ii) of this subsection, so long as they meet all of the following conditions:
- (A) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose;
- (B) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;
- (C) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;
- (D) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in Part 265, Subpart W which is incorporated by reference at WAC 173-303-400 (3)(a), regardless of whether the plant generates a total of less than 220 pounds/month of dangerous waste; and
- (E) Prior to operating pursuant to this exclusion, the plant owner or operator submits to the department a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than three years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the department for reinstatement. The department may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur.
  - (F) Additional reports.
- (I) Upon determination by the department that the storage of wood preserving wastewaters and spent wood preserving solutions 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 wood preserving wastewaters and spent wood preserving solutions. This authority applies to tanks and secondary containment systems used to store wood preserving wastewaters and spent wood preserving solutions 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 wood preserving wastewaters and spent wood preserving solutions or the generation of hazardous by-products. Such 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.
- (II) When required by the department, a qualified, independent professional engineer registered to practice in Wash-

- ington state must perform the assessment of the integrity of tanks or secondary containment systems.
- (III) Requirement for facility repairs and improvements. If, upon evaluation of information obtained by the department under (w)(iii)(F)(I) 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 wood preserving wastewaters and spent wood preserving solutions until such repairs or improvements are completed and approved by the department.
- (x) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.
- (y) Used oil filters that are recycled in accordance with WAC 173-303-120, as used oil and scrap metal.
- (z) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
- (aa)(i) Wastes that fail the test for the toxicity characteristic in WAC 173-303-090 because chromium is present or are listed in WAC 173-303-081 or 173-303-082 due to the presence of chromium. The waste must not designate for any other characteristic under WAC 173-303-090, for any of the criteria specified in WAC 173-303-100, and must not be listed in WAC 173-303-081 or 173-303-082 due to the presence of any constituent from WAC 173-303-9905 other than chromium. The waste generator must be able to demonstrate that:
- (A) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and
- (B) The waste is generated from an industrial process that uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and
- (C) The waste is typically and frequently managed in nonoxidizing environments.
- (ii) Specific wastes which meet the standard in (aa)(i)(A), (B), and (C) of this subsection (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:
- (A) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (B) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (C) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; no beamhouse; throughthe-blue.
- (D) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/

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retan/wet finish; retan/wet finish; no beamhouse; throughthe-blue; and shearling.

- (E) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (F) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.
- (G) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.
- (H) Wastewater treatment sludges from the production of TiO2 pigment using chromium-bearing ores by the chloride process.
- (bb)(i) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in WAC 173-303-040 - blast furnaces, smelting, melting and refining furnaces, and other devices the department may add to the list - of the definition for "industrial furnace"), that are disposed in subtitle D units, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph for all constituents, and exhibit no characteristics of dangerous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

	Maximum for any single	
Constituent	composite sample-TCLP (mg/l)	
Generic	exclusion levels for K061	
and K062 n	onwastewater HTMR residues	
Antimony	0.10	
Arsenic	0.50	
Barium	7.6	
Beryllium	0.010	
Cadmium	0.050	
Chromium (tota		
(2)Lead	0.15	
* *	0.009	
Mercury		
Nickel	1.0	
Selenium	0.16	
Silver	0.30	
Thallium	0.020	
Zinc	70	
Generic exclusion levels for		
F006 nonwastewater HTMR residues		
Antimony	0.10	
Arsenic	0.50	
Barium	7.6	
Beryllium	0.010	

	Maximum for any single
Constituent	composite sample-TCLP (mg/l)
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (m	ng/kg) 1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

(ii) A one-time notification and certification must be placed in the facility's files and sent to the department for K061, K062 or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to subtitle D units. The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes and/or if the subtitle D unit receiving the waste changes. However, the generator or treater need only notify the department on an annual basis if such changes occur. Such notification and certification should be sent to the department by the end of the calendar year, but no later than December 31. The notification must include the following information: The name and address of the subtitle D unit receiving the waste shipments; the dangerous waste number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of dangerous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment." These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics (WAC 173-303-090) or criteria (WAC 173-303-100).

(cc)(i) Oil-bearing hazardous secondary materials (that is, sludges, by-products, or spent materials) that are generated at a petroleum refinery (NAICS code 324110) and are inserted into the petroleum refining process (NAICS code 324110 - including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (that is, cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph: Provided, That the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in (cc)(ii) of this subsection, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (that is, from sources other than petroleum refineries) are not excluded under this section. Residuals generated from processing or recycling materials excluded under this paragraph, where such materials as

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generated would have otherwise met a listing under WAC 173-303-081 and 173-303-082, are designated as F037 listed wastes when disposed of or intended for disposal.

- (ii) Recovered oil that is recycled in the same manner and with the same conditions as described in (cc)(i) of this subsection. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (NAICS codes 211111, 211112, 213111, 213112, 541360, 237120, 238910, 324110, 486110, 486910, 486210, 221210, 488210, 488999, 424710, 454311, 454312, 424720, 425120). Recovered oil does not include oil-bearing hazardous wastes listed in WAC 173-303-081 and 173-303-082; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in WAC 173-303-040.
- (dd) Dangerous waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are dangerous only because they exhibit the toxicity characteristic (TC) specified in WAC 173-303-090(8) when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.
- (ee) Biological treatment sludge from the treatment of one of the following wastes listed in WAC 173-303-9904 organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (Dangerous Waste No. K156), and wastewaters from the production of carbamates and carbamoyl oximes (Dangerous Waste No. K157) unless it exhibits one or more of the characteristics or criteria of dangerous waste.
- (ff) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.
- (gg) Shredded circuit boards being recycled: Provided, That they are:
- (i) Stored in containers sufficient to prevent a release to the environment prior to recovery; and
- (ii) Free of mercury switches, mercury relays and nickelcadmium batteries and lithium batteries.
- (hh) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (NAICS code 324110) along with normal petroleum refinery process streams, provided:
- (i) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in WAC 173-303-090(5) and/or toxicity for benzene (WAC 173-303-090(8), waste code D018); and
- (ii) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process.

- An "associated organic chemical manufacturing facility" is a facility where the primary NAICS code is 325110, 325120, 325188, 325192, 325193, or 325199, but where operations may also include NAICS codes 325211, 325212, 325110, 325132, 325192; and is physically colocated with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (that is, sludges, byproducts, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.
- (ii) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in WAC 173-303-016(5).
- (jj) Catalyst inert support media separated from one of the following wastes listed in WAC 173-303-9904 Specific Sources Spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and Spent hydrorefining catalyst (EPA Hazardous Waste No. K172). These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics or criteria.
- (kk) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed: Provided, That:
- (i) The solid wastes disposed would meet one or more of the listing descriptions for Hazardous Waste Codes K169, K170, K171, K172, K174, K175, K176, K177, K178, and K181 if these wastes had been generated after the effective date of the listing;
- (ii) The solid wastes described in (kk)(i) of this subsection were disposed prior to the effective date of the listing;
- (iii) The leachate or gas condensate do not exhibit any characteristic or criteria of dangerous waste nor are derived from any other listed hazardous waste;
- (iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act.
- (v) As of February 13, 2001, leachate or gas condensate derived from K169 - K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. As of November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After February 26, 2007, leachate or gas condensate derived from K181 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: If the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (for example, shutdown of wastewater treatment system): Provided, That the impoundment has a double liner, and: Provided further, That the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this paragraph after the emergency ends.

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- (II) Dredged material. Dredged material as defined in 40 CFR 232.2 that is subject to:
- (i) The requirements of a permit that has been issued by the U.S. Army Corps of Engineers or an approved state under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);
- (ii) The requirements of a permit that has been issued by the U.S. Army Corps of Engineers under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or
- (iii) In the case of a U.S. Army Corps of Engineers civil works project, the administrative equivalent of the permits referred to in (ll)(i) and (ii) of this subsection, as provided for in U.S. Army Corps of Engineers regulations, including, for example, 33 CFR 336.1, 336.2 and 337.3.
- (mm) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.
- (nn)(i) Controlled substances, legend drugs, and overthe-counter drugs that are state-only dangerous wastes.
- (A) Controlled substances as defined and regulated by chapter 69.50 RCW (Schedule I through V);
- (B) Legend drugs as defined and regulated by chapter 69.41 RCW; and
- (C) Over-the-counter drugs as defined and regulated by chapter 69.60 RCW.
- (ii) Controlled substances, legend drugs, and over-the-counter drugs that are held in the custody of law enforcement agencies or possessed by any licensee as defined and regulated by chapter 69.50 RCW or Title 18 RCW and authorized to possess drugs within the state of Washington are excluded, provided the drugs are disposed of by incineration in a controlled combustion unit with a heat input rate greater than 250 million British thermal units/hour, a combustion zone temperature greater than 1500 degrees Fahrenheit, or a facility permitted to incinerate municipal solid waste.
- (iii) For the purposes of this exclusion the term "drugs" means:
- (A) Articles recognized in the official United States pharmacopoeia or the official homeopathic pharmacopoeia of the United States;
- (B) Substances intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or
- (C) Substances (other than food) intended to affect the structure or any function of the body of man or other animals, as defined in RCW 18.64.011(3). (Note: RCW 18.64.011 (3)(d) is intentionally not included in the definition of drugs for this exclusion.)
- (iv) When possessed by any licensee the term drugs used in this exclusion means finished drug products.
- (oo) Cathode ray tubes (CRTs) and glass removed from CRTs:
- (i) Prior to processing: These materials are not solid wastes if they are destined for recycling and if they meet the following requirements:
  - (A) Storage. CRTs must be either:
  - (I) Stored in a building with a roof, floor, and walls; or
- (II) Placed in a container (that is, a package or a vehicle) that is constructed, filled, and closed to minimize releases to

- the environment of CRT glass (including fine solid materials).
- (B) Labeling. Each container in which the CRT is contained must be labeled or marked clearly with one of the following phrases: "Used cathode ray tube(s) contains leaded glass" or "leaded glass from televisions or computers." It must also be labeled: "Do not mix with other glass materials."
- (C) Transportation. CRTs must be transported in a container meeting the requirements of (oo)(i)(A)(II) and (B) of this subsection.
- (D) Speculative accumulation and use constituting disposal. CRTs are subject to the limitations on speculative accumulation as defined in WAC 173-303-016 (5)(d). If they are used in a manner constituting disposal, they must comply with the applicable requirements of WAC 173-303-505 instead of the requirements of this section.
- (E) Exports. In addition to the applicable conditions specified in (oo)(i)(A) through (D) of this subsection, exporters of CRTs must comply with the following requirements:
- (I) Notify EPA of an intended export before the CRTs are scheduled to leave the United States. A complete notification should be submitted sixty days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a twelve-month or lesser period. The notification must be in writing, signed by the exporter, and include the following information:
- Name, mailing address, telephone number and EPA/state ID number (if applicable) of the exporter of the CRTs.
- The estimated frequency or rate at which the CRTs are to be exported and the period of time over which they are to be exported.
- The estimated total quantity of CRTs specified in kilograms.
- All points of entry to and departure from each foreign country through which the CRTs will pass.
- A description of the means by which each shipment of the CRTs will be transported (for example, mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.)).
- The name and address of the recycler and any alternate recycler.
- A description of the manner in which the CRTs will be recycled in the foreign country that will be receiving the CRTs.
- The name of any transit country through which the CRTs will be sent and a description of the approximate length of time the CRTs will remain in such country and the nature of their handling while there.
- (II) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 1200 Pennsylvania Ave., N.W., Washington, D.C. In both cases, the following must be prominently displayed on the

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front of the envelope: "Attention: Notification of intent to export CRTs."

- (III) Upon request by EPA, the exporter must furnish to EPA any additional information which a receiving country requests in order to respond to a notification.
- (IV) EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of (oo)(i)(E)(I) of this subsection. Where a claim of confidentiality is asserted with respect to any notification information required by (oo)(i)(E)(I) of this subsection, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.
- (V) The export of CRTs is prohibited unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the CRTs, EPA will forward an "Acknowledgment of Consent" to export CRTs to the exporter. Where the receiving country objects to receipt of the CRTs or withdraws a prior consent, EPA will notify the exporter in writing. EPA will also notify the exporter of any responses from transit countries.
- (VI) When the conditions specified on the original notification change, the exporter must provide EPA with a written renotification of the change, except for changes to the telephone number in (oo)(i)(E)(I)(first bullet) of this subsection and decreases in the quantity indicated pursuant to (oo)(i)(E)(I)(third bullet) of this subsection. The shipment cannot take place until consent of the receiving country to the changes has been obtained (except for changes to information about points of entry and departure and transit countries pursuant to (oo)(i)(E)(I)(fourth bullet) and (i)(E)(I)(eighth bullet) of this section) and the exporter of CRTs receives from EPA a copy of the "Acknowledgment of Consent" to export CRTs reflecting the receiving country's consent to the changes.
- (VII) A copy of the "Acknowledgment of Consent" to export CRTs must accompany the shipment of CRTs. The shipment must conform to the terms of the Acknowledgment.
- (VIII) If a shipment of CRTs cannot be delivered for any reason to the recycler or the alternate recycler, the exporter of CRTs must renotify EPA of a change in the conditions of the original notification to allow shipment to a new recycler in accordance with (oo)(i)(E)(VI) of this subsection and obtain another "Acknowledgment of Consent" to export CRTs.
- (IX) Exporters must keep copies of notifications and "Acknowledgments of Consent" to export CRTs for a period of five years following receipt of the "Acknowledgment."
- (ii) Requirements for used CRT processing: CRTs undergoing CRT processing as defined in WAC 173-303-040 are not solid wastes if they meet the following requirements:
- (A) Storage. CRTs undergoing processing are subject to the requirement of (oo)(i)(D) of this subsection.
  - (B) Processing.
- (I) All activities specified in the second and third bullets of the definition of "CRT processing" in WAC 173-303-040 must be performed within a building with a roof, floor, and walls; and
- (II) No activities may be performed that use temperatures high enough to volatilize lead from CRTs.

- (iii) Processed CRT glass sent to CRT glass making or lead smelting: Glass from CRTs that is destined for recycling at a CRT glass manufacturer or a lead smelter after processing is not a solid waste unless it is speculatively accumulated as defined in WAC 173-303-016 (5)(d).
- (iv) Use constituting disposal: Glass from used CRTs that is used in a manner constituting disposal must comply with the requirements of WAC 173-303-505.
- (v) Notification and recordkeeping for cathode ray tubes (CRTs) exported for reuse.
- (A) Persons who export CRTs for reuse must send a onetime notification to the U.S. EPA Regional Administrator. The notification must include a statement that the notifier plans to export CRTs for reuse, the notifier's name, address, and EPA/state ID number (if applicable) and the name and phone number of a contact person.
- (B) Persons who export CRTs for reuse must keep copies of normal business records, such as contracts, demonstrating that each shipment of exported CRTs will be reused. This documentation must be retained for a period of at least five years from the date the CRTs were exported.
- (pp) Zinc fertilizers made from hazardous wastes provided that:
  - (i) The fertilizers meet the following contaminant limits:
  - (A) For metal contaminants:

Maximum Allowable Total Concentration Constituent in Fertilizer, per Unit (1%) of Zinc (ppm)

Arsenic	0.3
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

- (B) For dioxin contaminants the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).
- (ii) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the product(s) introduced into commerce.
- (iii) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of (pp)(ii) of this subsection. Such records must at a minimum include:
- (A) The dates and times product samples were taken, and the dates the samples were analyzed;
- (B) The names and qualifications of the person(s) taking the samples;
- (C) A description of the methods and equipment used to take the samples;

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- (D) The name and address of the laboratory facility at which analyses of the samples were performed;
- (E) A description of the analytical methods used, including any cleanup and sample preparation methods; and
- (F) All laboratory analytical results used to determine compliance with the contaminant limits specified in this subsection (3)(pp).
- (qq) Debris. Provided the debris does not exhibit a characteristic identified in WAC 173-303-090, the following materials are not subject to regulation under this chapter:
- (i) Hazardous debris that has been treated using one of the required extraction or destruction technologies specified in Table 1 of 40 CFR section 268.45, which is incorporated by reference at WAC 173-303-140 (2)(a); persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or
- (ii) Debris that the department, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-071, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-303-071, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-071, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-071, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-071, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018, (Order 97-03), § 173-303-071, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-071, filed 10/19/95, effective 11/19/95; 94-12-018 (Order 93-34), § 173-303-071, filed 5/23/94, effective 6/23/94; 94-01-060 (Order 92-33), § 173-303-071, 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), § 173-303-071, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-071, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-071, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-071, filed 6/3/86; 85-09-042 (Order DE-85-02), § 173-303-071, filed 4/15/85; 84-09-088 (Order DE 83-36), § 173-303-071, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-071, filed 2/10/82.]

## WAC 173-303-072 Procedures and bases for exempting and excluding wastes. (1) Purpose and applicability.

- (a) The purpose of this section is to describe the procedures that will be followed by generators and the department when wastes are considered for exemption or exclusion from the requirements of this chapter. Any person(s) whose waste is exempted or excluded will not be subject to the requirements of this chapter unless the department revokes the exemption or exclusion.
- (b) Any person seeking a waste exemption must submit a petition to the department according to the procedures of WAC 173-303-910(3). A petition for exemption will be assessed against the applicable bases for exemption described in subsections (3), (4), and (5) of this section.
- (c) Any persons seeking to categorically exclude a class of wastes must submit a petition to the department according to the procedures of WAC 173-303-910(4). A petition for exclusion will be assessed against the applicable bases for exclusion described in subsection (6) of this section.

- (2) Department procedures. When considering, granting, or denying a petition for exemption or exclusion, the department will follow the appropriate procedures described in WAC 173-303-910(1).
- (3) Bases for exempting wastes. To successfully petition the department to exempt a waste, the petitioner must demonstrate to the satisfaction of the department that:
- (a) He has been able to accurately describe the variability or uniformity of his waste over time, and has been able to obtain demonstration samples which are representative of his waste's variability or uniformity; and, either
- (b) The representative demonstration samples of his waste are not designated DW or EHW by the dangerous waste criteria, WAC 173-303-100; or
- (c) It can be shown, from information developed by the petitioner through consultation with the department, that his waste does not otherwise pose a threat to public health or the environment. However, this basis for exemption is not applicable to wastes that exhibit any of the characteristics specified in WAC 173-303-090, except 173-303-090 (6)(a)(iii).
- (4) Additional bases for exempting listed wastes. In addition to the demonstrations required by subsections (3)(a) and (b) of this section, for wastes listed in WAC 173-303-081 or 173-303-082 the petitioner must also demonstrate to the satisfaction of the department that his waste is not capable of posing a substantial present or potential threat to public health or the environment when improperly treated, stored, transported, disposed of or otherwise managed. The following factors will be considered by the department when assessing such a demonstration:
- (a) Whether or not the listed waste contains the constituent or constituents which caused it to be listed. (For the purposes of this subsection, the constituents referred to will include any of the dangerous waste constituents listed in WAC 173-303-9905);
- (b) The nature of the threat posed by the waste constituent(s);
  - (c) The concentration of the constituent(s) in the waste;
- (d) The potential of the constituent(s) or any degradation product of the constituent(s) to migrate from the waste into the environment under the types of improper management considered in (h) of this subsection;
- (e) The persistence of the constituent(s) or any degradation product of the constituent(s);
- (f) The potential for the constituent(s) or any degradation product of the constituent(s) to degrade into nonharmful constituents and the rate of degradation;
- (g) The degree to which the constituent(s) or degradation product of the constituent(s) bioaccumulates in ecosystems;
- (h) The plausible types of improper management to which the waste could be subjected;
- (i) The quantities of the waste generated at individual generation sites or on a statewide basis. Under this factor, the department will also consider whether or not the waste is listed under WAC 173-303-081 as a discarded chemical product and occurs in a relatively pure form. Any waste discarded chemical product which exceeds the quantity exclusion limit specified in WAC 173-303-081(2) for that waste will not be exempted;
- (j) The nature and severity of the public health and environmental damage that has occurred as a result of the

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improper management of wastes containing the constituent(s);

- (k) Actions taken by other governmental agencies or regulatory programs based on the health or environmental threat posed by the waste or waste constituent(s); and
  - (1) Such other factors as may be appropriate.
  - (5) Reserve.
- (6) Bases for categorically excluding classes of wastes. This subsection does not apply to any waste class that includes hazardous waste regulated under 40 CFR Part 261. To successfully petition the department to categorically exclude a class of wastes, petitioners must demonstrate to the satisfaction of the department that the petition or petitions for exclusion:
- (a) Accurately describe the class of wastes for which categorical exclusion is sought and show that the class of wastes does not include any wastes which would be regulated as hazardous waste under 40 CFR Part 261;
- (b) Describe the variability or uniformity of the class of wastes over time and in relation to the individual wastes that comprise the class of waste;
- (c) Discuss the generators and their individual wastes that belong to the class of wastes and, to the extent practical, any generators or individual wastes that, although belonging to the class of wastes, are not represented by the petition or petitions; and
- (d) For each individual waste within the class of wastes, provide the demonstration described by subsection (3) of this section, except that where it is determined by consultation with the department to be impractical to provide the demonstration for each individual waste, the petitioner or petitioners will provide the demonstration for samples of the individual wastes determined by consultation with the department to be representative of the class of wastes.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-072, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-072, 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), § 173-303-072, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-14-031 (Order DE 84-22), § 173-303-072, filed 6/27/84.]

## WAC 173-303-073 Conditional exclusion of special wastes. (1) Purpose. Special wastes pose a relatively low hazard to human health and the environment. The department believes that special wastes can be safely managed with a level of protection that is intermediate between dangerous and nondangerous solid wastes. This section establishes a conditional exclusion for the management of special wastes.

(2) Exclusion. Special wastes are excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050; 173-303-060; 173-303-140 (4)(c); 173-303-145; 173-303-960; and 173-303-510 excluding subsections (4)(a), (4)(b)(iii), (5), (6)(c), and (6)(d). In addition, special waste must be treated as dangerous waste for purposes of pollution prevention planning as required in chapters 173-307 and 173-305 WAC. Special wastes will not be considered as dangerous waste, provided they are managed in accordance with the standards in this subsection and provided they are disposed, legitimately recycled, or treated on-site consistent with the requirements of WAC 173-303-170 (3)(c).

- (a) Generators may not accumulate special waste on-site for more than one hundred eighty days from the date the quantity of waste exceeds two thousand two hundred pounds. The generator must keep a written record showing the dates when accumulation of the wastes began;
- (b) During accumulation, special waste 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, etc.;
- (c) Facilities that receive special waste for recycling must meet the requirements of (b) of this subsection and store special wastes for no more than one hundred eighty days.
- (d) All workers handling special wastes must be informed of the waste's potential hazard, either through worker training, health and safety plans, or notification of workers on a case-by-case basis;
- (e) Special wastes must be transported directly from their site of generation to any offsite recycling, treatment, or disposal destination. The wastes must not pass through any intermediate solid waste processing facility, such as a transfer station, unless:
- (i) The transfer station operator has made specific provisions for managing special waste by physical segregation, packing, or other means to ensure that workers and the public are not exposed to the waste stream at the transfer station;
- (ii) The provisions are reflected in the facilities operating plans;
- (iii) The plans have been approved by the transfer station's solid waste permitting authority; and
- (iv) The transfer station operator has informed workers of the wastes' potential hazard according to (d) of this subsection;
- (f) A document must accompany special waste during transit which identifies the type and amount of special waste, its place of origin, the identity of the generator, and the facility to which it is directed. An example form is provided in WAC 173-303-9906. The generator and the receiving facility must maintain a record of the facilities receipt of the special waste for at least five years;
- (g) Disposal of special waste must be in landfill units which:
- (i) Are permitted in accordance with chapter 173-351 WAC, provided that an engineered liner is used to meet the requirements of arid landfill design requirements, WAC 173-351-300 (2)(b), or are permitted under WAC 173-303-800 through 173-303-840 or if out-of-state under 40 CFR Part 258 or Part 270; and
- (ii) Are not currently undergoing corrective action under WAC 173-351-440(6), 40 CFR 258.56, or a similar requirement in state regulations approved by the United States EPA pursuant to 42 U.S.C. 6945 (c)(1)(B).
  - (3) Reserve.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-073, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-073, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-073, filed 10/19/95, effective 11/19/95.]

**WAC 173-303-075** Certification of designation. (1) Purpose and applicability.

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- (a) The purpose of WAC 173-303-075 is to establish procedures by which the generator of a solid waste may apply to the department for a review of his waste, and for a determination of the designation of his waste. When a final determination is made, the department will issue a certificate of designation which will describe the status of the generator's waste with respect to the designation requirements of this chapter 173-303 WAC.
- (b) The provisions of this section are applicable to any person who produces a solid waste, who may be subject to the requirements of this chapter 173-303 WAC as the generator of a dangerous waste and who wishes to obtain a certificate designating the status of his waste.
- (2) Certification. Any person who produces a solid waste which could be a dangerous waste may apply to the department, in accordance with the guidelines published pursuant to WAC 173-303-075(4), for a certificate of designation for his waste
- (a) The certificate of designation will describe the status of the designation for a waste or wastes as follows:
- (i) Either, the certificate will state that the waste or wastes listed in the certificate are designated dangerous waste; or
- (ii) The certificate will state that the waste or wastes listed in the certificate are not designated dangerous waste under the designation lists or characteristics of WAC 173-303-080 through 173-303-090; or
- (iii) The certificate will state that the waste or wastes listed in the certificate are not designated dangerous waste under the dangerous waste lists, characteristics or criteria, WAC 173-303-080 through 173-303-100.
- (b) The certificate of designation will, at a minimum, include the following information:
- (i) The name, address, telephone number and, where applicable, the EPA/state identification number of the person to whom the certificate is issued;
- (ii) A statement of the status of the designation of the waste or wastes listed in the certificate and, if designated, whether DW or EHW;
- (iii) A listing of the waste or wastes for which the certificate has been issued;
  - (iv) The signature of the director or his designee;
  - (v) The date on which the certificate was issued; and
- (vi) The period of time or conditions for which the certificate is valid.
- (c) Once a certificate of designation has been issued to a person, that person is no longer subject to the designation procedures of WAC 173-303-080 through 173-303-100, unless the period of time for which the certificate is valid expires, the conditions under which the certificate is valid change, or the department withdraws its certification of designation in accordance with WAC 173-303-075(5). If the certificate states that the waste or wastes listed in it are designated, then the person to whom the certificate is issued must comply with all applicable requirements of this chapter 173-303 WAC. If the certificate states that the waste or wastes listed in it are not designated, then the person to whom the certificate is issued is not subject to the requirements of this chapter 173-303 WAC, unless the certificate becomes invalid or the department withdraws its certification.

- (d) While an application for a certificate of designation is pending final action by the department, the person applying for certification must comply with all applicable requirements of this chapter 173-303 WAC.
- (e) While a certificate of designation is being amended, in accordance with WAC 173-303-075(5), the certificate will remain in effect except for those parts of the certificate which the department specifically suspends.
- (3) Designation. Determination of the status of designation for a waste or wastes for which a certificate of designation is being sought will follow the procedures set forth in this subsection.
- (a) A waste will be certified as a dangerous waste if it is designated under any of the methods set forth in WAC 173-303-080 through 173-303-100.
  - (b) A waste will be certified as not a dangerous waste if:
- (i) It has only been checked against WAC 173-303-080 through 173-303-090 (lists and characteristics) and it is not designated; or
- (ii) It has been checked against the dangerous waste lists, characteristics and criteria, WAC 173-303-080 through 173-303-100, and it is not designated.
- (4) Application. Any person who wishes to apply for a certificate of designation must do so according to the certification guidelines published by and available from the department. The department will follow the procedures specified in the certification guidelines when considering an application for a certificate.
- (5) Review of certification. Review of and changes to or withdrawal of certificates of designation will be performed by the department according to the procedures specified in the certification guidelines, available from the department. At a minimum, the certification guidelines provide for the following procedures:
- (a) The department will periodically review each certificate of designation to insure that it is current and accurately states the proper designation for the waste or wastes listed on the certificate.
- (b) The department may amend, or any person with a certificate of designation may request the department to amend, any certificate in the event that changes to the certificate are necessary to keep it current or maintain its accuracy. The person will obtain concurrence of the department if he wishes to amend his certificate to reflect changes in the information on the certificate (e.g., new wastes, changes in waste properties, changes of address, etc.).
- (c) The department reserves the authority to withdraw any certificate of designation if there is reason to believe that the certificate results in a threat to public health or the environment. If a certificate is withdrawn, then the waste or wastes listed on the certificate will be subject to all applicable requirements of this chapter 173-303 WAC.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-075, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-075, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-075, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-075, filed 2/10/82.]

WAC 173-303-077 Requirements for universal waste. The wastes listed in this section are exempt from reg-

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ulation under WAC 173-303-140, 173-303-170 through 173-303-9907 (except for WAC 173-303-960), and except as specified in WAC 173-303-573, and therefore are not fully regulated as dangerous waste. The wastes listed in this section are subject to regulation under WAC 173-303-573:

- (1) Batteries as described in WAC 173-303-573(2);
- (2) Mercury-containing equipment as described in WAC 173-303-573(3); and
  - (3) Lamps as described in WAC 173-303-573(5).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-077, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-077, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-077, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-077, filed 1/12/98, effective 2/12/98.]

### WAC 173-303-080 Dangerous waste lists. The dangerous waste lists include:

- (1) WAC 173-303-081, Discarded chemical products;
- (2) WAC 173-303-082, Dangerous waste sources.

[Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-080, filed 1/4/89. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-080, filed 2/10/82.]

#### WAC 173-303-081 Discarded chemical products. (1)

A waste will be designated as a dangerous waste and assigned a "P" or "U" code if it is handled in any of the manners described in (e) of this subsection, and if it is a residue from the management of:

- (a) A commercial chemical product or manufacturing chemical intermediate (see definition in WAC 173-303-040) which has the generic name listed in the discarded chemical products list, WAC 173-303-9903;
- (b) An off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have the generic name listed in the discarded chemical products list, WAC 173-303-9903;
- (c) Any containers, inner liners, or residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate that has, or any off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have, the generic name listed on the "P" or "U" discarded chemical products list of WAC 173-303-9903, unless the containers or inner liners are empty as described in WAC 173-303-160(2);
- (d) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of a commercial chemical product or manufacturing chemical intermediate which has, or of an off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have, the generic name listed in the discarded chemical products list, WAC 173-303-9903;
- (e) The materials or items described in (a), (b), (c), and (d) of this subsection are dangerous wastes when they are:
- (i) Discarded or intended to be discarded as described in WAC 173-303-016 (3)(b)(i);
- (ii) Burned for purposes of energy recovery in lieu of their original intended use;

- (iii) Used to produce fuels in lieu of their original intended use;
- (iv) Applied to the land in lieu of their original intended use; or
- (v) Contained in products that are applied to the land in lieu of their original intended use.
  - (2) Quantity exclusion limits:
- (a) A person with a waste or wastes (including residues from the management of wastes) identified in subsection (1) of this section, will be a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the amount of his waste exceeds the following quantity exclusion limits:
- (i) For chemicals designated on the "P" discarded chemical products list of WAC 173-303-9903 2.2 lbs. (1.0 kg) per month or per batch. Such wastes are designated DW and are identified as acute hazardous wastes;
- (ii) For chemicals, and for residues from the cleanup of spills involving chemicals, designated on the "U" discarded chemical products list of WAC 173-303-9903 220 lbs. (100 kg) per month or per batch. Such wastes are designated DW;
- (iii) For containers or inner liners which held any chemical designated on the "P" discarded chemical products list of WAC 173-303-9903 2.2 lbs. (1.0 kg) of residue remaining in the containers or inner liners per month or per batch unless the containers or inner liners meet the definition of empty and have been triple rinsed as described in WAC 173-303-160(2). Such wastes are designated DW and are identified as acute hazardous wastes;
- (iv) For residues, contaminated soil, water, or other debris from the cleanup of a spill of any chemical designated on the "P" discarded chemical products list of WAC 173-303-9903 220 lbs. (100 kg) per month or per batch. Such wastes are designated DW and are identified as acute hazardous wastes.
- (b) A person's total monthly waste quantity is the sum of all their wastes which share a common quantity exclusion limit (e.g., the total quantity of all discarded chemical products with a 2.2 pound QEL, the total quantity of all residues contaminated by discarded chemical products with a 2.2 pound QEL, etc.) which were generated during a month or a batch operation at each specific waste generation site.
- (3) Dangerous waste numbers and mixtures. A waste that has been designated as a discarded chemical product dangerous waste must be assigned the dangerous waste number or numbers listed in WAC 173-303-9903 next to the generic chemical or chemicals that caused the waste to be designated. A mixture of a solid waste with a waste that would be designated as a discarded chemical product under this section must be designated. The mixture designation is the same as the designation for the discarded chemical product that was mixed with the solid waste unless it has been excluded under WAC 173-303-070 (2)(c). For example, a mixture containing 2.2 lbs. (1 kg) of Aldrin (dangerous waste number P004, DW designation, QEL of 2.2 lbs.) and 22 lbs. (10 kg) of a solid waste, would be designated DW, and identified as acute hazardous waste. The mixture would have the dangerous waste number P004.
  - (4) Reserve.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-081, filed 6/30/09, effective 7/31/09. Statutory

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Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-081, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-081, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-081, 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), § 173-303-081, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-081, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-081, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-081, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-081, filed 2/10/82.]

- WAC 173-303-082 Dangerous waste sources. (1) The dangerous waste sources list appears in WAC 173-303-9904. Any waste that is listed or is a residue from the management of a waste listed on the dangerous waste sources list must be designated a dangerous waste, and identified as DW. Dangerous waste sources codes include WPCB or codes that begin with an "F" or "K."
- (2) Quantity exclusion limit. A person whose waste is listed in WAC 173-303-9904 (including residues from the management of such wastes) is a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the amount of his waste exceeds the following quantity exclusion limits:
- (a) 2.2 lbs. (1 kg) per month or per batch for wastes listed with the dangerous waste numbers F020, F021, F022, F023, F026, or F027. These wastes are designated DW and identified as acute hazardous wastes;
- (b) 220 lbs. (100 kg) per month or per batch of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water of a waste listed in (a) of this subsection, or of an acute hazardous waste listed in WAC 173-303-9904 under specific sources ("K" wastes). Note: Acute hazardous K listed wastes are followed by an "H." These wastes are designated DW and identified as acute hazardous wastes; or
- (c) 220 lbs. (100 kg) per month or per batch for all other wastes.
- (3) Care should be taken in the proper designation of these wastes and of mixtures of these wastes and solid wastes. A mixture of a solid waste with a waste that would be designated as a dangerous waste source under this section must be designated as a dangerous waste source unless it has been excluded under WAC 173-303-070 (2)(c). The mixture has the same designation (DW), and the same dangerous waste number as the dangerous waste source which was mixed with the solid waste.
- (4) 40 CFR Part 261 Appendix VII Basis for Listing Hazardous Waste is adopted by reference.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-082, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-082, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW, 98-03-018 (Order 97-03), § 173-303-082, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-082, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-082, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-082, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-082, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-082, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-082, filed 2/10/82.]

- WAC 173-303-083 Deletion of certain dangerous waste codes following equipment cleaning and replacement. (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 groundwater, 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 as incorporated by reference at WAC 173-303-110 (3)(a).
- (B) "Not detected" means at or below the lower method calibration limit (MCL) in accordance with SW-846, Method 8290, Table 1 as incorporated by reference at WAC 173-303-110 (3)(a).
- (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.

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- (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
- (I) 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. 09-14-105 (Order 07-12), § 173-303-083, filed 6/30/09, effective 7/31/09; 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 generator 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 D93-06, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D3278-96 (2004)e1 as incorporated by reference at WAC 173-303-110 (3)(h)(v) and (vi);
- (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.
- (A) The term "compressed gas" applies to any material or mixture having in the container an absolute pressure exceeding 40 p.s.i. at 70 degrees F or, regardless of the pressure at 70 degrees F, having an absolute pressure exceeding 104 p.s.i. at 130 degrees F; or any liquid flammable material having a vapor pressure exceeding 40 p.s.i. absolute at 100 degrees F as determined by ASTM Test D-323.
- (B) A compressed gas must be characterized as ignitable if any one of the following occurs:
- (I) Either a mixture of 13 percent or less (by volume) with air forms a flammable mixture or the flammable range with air is wider than 12 percent regardless of the lower limit. These limits must be determined at atmospheric temperature and pressure. The method of sampling and test procedure must be acceptable to the Bureau of Explosives and approved by the director, Pipeline and Hazardous Materials Technology, U.S. Department of Transportation (see Note 2).
- (II) Using the Bureau of Explosives' Flame Projection Apparatus (see Note 1), the flame projects more than 18 inches beyond the ignition source with valve opened fully, or the flame flashes back and burns at the valve with any degree of valve opening.
- (III) Using the Bureau of Explosives' Open Drum Apparatus (see Note 1), there is any significant propagation of flame away from the ignition source.
- (IV) Using the Bureau of Explosives' Closed Drum Apparatus (see Note 1), there is any explosion of the vaporair mixture in the drum; or,
- (iv) It is an oxidizer. An oxidizer for the purpose of this subsection is a substance such as a chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter (see Note 4).

An organic compound containing the bivalent -O-Ostructure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals must be classed as an organic peroxide unless:

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- (A) 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, in which case it must be classed as an explosive;
- (B) The material is forbidden to be offered for transportation according to 49 CFR 172.101 and 49 CFR 173.21;
- (C) It is determined that the predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide; or
- (D) According to data on file with the Pipeline and Hazardous Materials Safety Administration in the U.S. Department of Transportation (see Note 3), it has been determined that the material does not present a hazard in transportation.
  - Note 1: A description of the Bureau of Explosives' Flame Projection Apparatus, Open Drum Apparatus, Closed Drum Apparatus, and method of tests may be procured from the Bureau of Explosives.
  - Note 2: As part of a U.S. Department of Transportation (DOT) reorganization, the Office of Hazardous Materials Technology (OHMT), which was the office listed in the 1980 publication of 49 CFR 173.300 for the purposes of approving sampling and test procedures for a flammable gas, ceased operations on February 20, 2005. OHMT programs have moved to the Pipeline and Hazardous Materials Safety Administration (PHMSA) in the DOT.
  - Note 3: As part of a U.S. Department of Transportation (DOT) reorganization, the Research and Special Programs Administration (RSPA), which was the office listed in the 1980 publication of 49 CFR 173.151a for the purposes of determining that a material does not present a hazard in transport, ceased operations on February 20, 2005. RSPA programs have moved to the Pipeline and Hazardous Materials Safety Administration (PHMSA) in the DOT.
  - Note 4: The DOT regulatory definition of an oxidizer was contained in Sec. 173.151 of 49 CFR, and the definition of an organic peroxide was contained in paragraph 173.151a. An organic peroxide is a type of oxidizer.
- (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 9040C 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 TM0169-2000 as standardized in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," (Method 1110A) EPA Publication SW-846, as incorporated by reference in WAC 173-303-110 (3)(a); or
- (iii) It is solid or semisolid which, upon testing using Method 9045D 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

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D.		(CI : 1	
Dangerous Wests		(Chemical	DW
Waste	G	Abstracts	DW
Number	Contaminant	Services #)	(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
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	(76-44-8)	0.008
2001	epoxide)	(/00)	0.000
D032	Hexachlorobenzene	(118-74-1)	
D032	Treatmentered	/2/	0.13
D033	Hexachlorobutadiene	(87-68-3)	0.5
D034	Hexachloroethane	(67-72-1)	3.0
D008	Lead	(7439-92-1)	5.0
D003	Lindane	(58-89-9)	0.4
D013	Mercury	(7439-97-6)	0.2
D009 D014	Methoxychlor	(72-43-5)	10.0
D014 D035	Methyl ethyl ketone	(78-93-3)	200.0
D033 D036	Nitrobenzene	(98-95-3)	2.0
D030 D037		(87-86-5)	100.0
D037 D038	Pentachlorophenol		100.0
D038	Pyridine	(110-86-1)	5.0
D010	0.1 :	/2/	
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. 09-14-105 (Order 07-12), § 173-303-090, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-090, filed 11/30/04, effective 1/1/05. 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 following toxicity data sources are adopted by reference:
- (a) 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.
- (b) The United States Environmental Protection Agency, Ecotoxicology Database (ECOTOX), Mid-Continent Ecology Division, 6201 Congdon Boulevard, Duluth, MN 55804.
- (c) The United States National Library of Medicine Toxicology Data Network, Hazardous Substance Database (HSDB), 8600 Rockville Pike, Bethesda, MD 20894.
- (3) A person must use data that are available to him or her, and, when such data are inadequate for the purposes of this section, must refer to the references identified in WAC 173-303-100(2) 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, for example, Registry for Toxic Effects of Chemical Substances (RTECS), Hazardous Substances Data Bank (HSDB), and Ecotoxicology database (ECOTOX). The toxic category should then be

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identified, using the table below. If data are available for more than one test endpoint (that is, fish, oral rat, inhalation rat, or dermal rabbit), the value with the highest toxicity must be used. Similarly, if toxicity data do not agree on the same toxic category within the same test endpoint, the value with the highest toxicity must be used. Finally, if toxicity data for a constituent cannot be found in reasonably available sources (for example, RTECS, HSDB or ECOTOX), the toxic category for that constituent need not be determined.

TOXIC CATEGORY TABLE

Toxic	Fish	Oral Rat	Inhalation Rat	Dermal Rabbit
Category	$LC_{50}(mg/L)^b$	$LD_{50}(mg/kg)$	$LC_{50}(mg/L)^{c}$	$LD_{50}(mg/kg)$
X	< 0.01	< 0.5	< 0.02	< 2
A	0.01 - < 0.1	0.5 - <5	0.02 - < 0.2	2 - < 20
В	0.1 - <1	5 - < 50	0.2 - <2	20 - <200
C	1 - < 10	50 - < 500	2 - < 20	200 - <2000
D	10 - 100	500 - 5000	20 - 200	2000 - 20,000

- These four test endpoints are defined in WAC 173-303-040.
   Fish LC<sub>50</sub> data must be derived from an exposure period greater than or equal to twenty-four hours. A hierarchy of species LC<sub>50</sub> data should be used that includes (in decreasing order of preference) salmonids, fathead minnows, and other fish species.
- Inhalation Rat LC<sub>50</sub> data must be derived from an exposure period greater than or equal to one hour.
- (ii) A person whose waste contains one or more toxic constituents must determine the equivalent concentration for the waste from the following formula:

Equivalent Concentration (%) = 
$$\frac{\sum X\%}{1} + \frac{\sum A\%}{10} + \frac{\sum B\%}{100} + \frac{\sum C\%}{1000} + \frac{\sum D\%}{10000}$$

where  $\Sigma(X,A,B,C, \text{ or } D)\%$  is the sum of all the concentration percentages for a particular toxic category.

Example 1. A person's waste contains: Aldrin (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:

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.

- (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 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 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

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- (3)(c) Chemical Testing Methods for Designating Dangerous Waste Publication #97-407.
- (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 concentration 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.

PERSISTENT DANGEROUS WASTE TABLE

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

<sup>\*</sup>No DW concentration level for PAH.

#### (7) Reserve.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-100, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-100, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-100, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 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.]

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#### 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 State-specific dangerous waste numbers. (1) Purpose. This section sets forth the dangerous waste number for each of the dangerous waste criteria designations and for listed and characteristic waste codes that are unique to Washington state.

(2) Characteristics. A waste that 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 (see WAC 173-303-090).

For state-only solid corrosive wastes, the dangerous waste number of WSC2 must be assigned.

(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	Dangerous Waste
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

(4) State source listed PCB wastes (WAC 173-303-9904) must be assigned the dangerous waste code of WPCB.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-104, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-104, filed 11/30/04, effective 1/1/05. 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, testing methods, and analytes. (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 D346-04e1;
- (ii) Extremely viscous liquid ASTM Standard D140-01 (2007);
- (iii) Fly ash-like material ASTM Standard D2234/D2234M-03e1;
- (iv) Soil-like material ASTM Standard D1452-80 (2000);
- (v) Soil or rock-like material ASTM Standard D420-98 (2003):
- (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 described in ASTM D5743-97 (2003). Per this method, the selection of an appropriate device must be best suited for the characteristics of the waste being sampled; 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 which can be obtained by writing to:

ASTM 100 Barr Harbor Drive West Conshohocken, PA 19428-2959

(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

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For copies of ASTM methods:

**ASTM** 

100 Barr Harbor Drive West Conshohocken, PA 19428-2959

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), IIIA (dated April 1998), IIIB (dated July 2005), and Final Update IV (dated February 2007)), which is incorporated by reference. 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, 1200 Pennsylvania Ave., NW, 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, June 2009 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 D4059-00 (2005)e1.
- (f) Appropriate analytical procedures to determine whether a sample contains a given toxic constituent are specified in Chapter Two, "Choosing the Correct Procedure" found in *Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, EPA Publication SW-846.*
- (g) The following publications for air emission standards (in addition to (a) of this subsection).

- (i) ASTM Standard Method for Analysis of Reformed Gas by Gas Chromatography, ASTM Standard D1946-90 (2006).
- (ii) ASTM Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), ASTM Standard D4809-06.
- (iii) ASTM Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, ASTM Standard E169-04.
- (iv) ASTM Standard Practices for General Techniques of Infrared Quantitative Analysis, ASTM Standard E168-06.
- (v) ASTM Standard Practice for Packed Column Gas Chromatography, ASTM Standard E260-96 (2006).
- (vi) ASTM Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, ASTM Standard D5580-02.
- (vii) ASTM Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, ASTM Standard D2879-97 (2002)e1.
- (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.
  - (h) The following publications:
- (i) "NFPA 30: Flammable and Combustible Liquids Code" (2003), available from the National Fire Protection Association, NFPA Headquarters, 1 Batterymarch Park, Quincy, MA 02169-7471.
- (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 E926-94, 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 D3278-96 (2004)e1, available from American Society for Testing and Materials
- (vi) ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Tester, ASTM Standard D93-06.
- (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

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proposed changes. The department may, at its discretion, schedule a public hearing on the proposed changes.

- (5) Equivalent testing methods. Any person may request department approval for the use of an equivalent testing method by submitting a petition, prepared in accordance with WAC 173-303-910(2), to the department.
- (6) Reporting analytical results. Ecology requires that all test methods report their analytical results for solid and soil samples on a dry weight basis. Reporting on a dry weight basis compensates for variability in water content and provides a consistent procedure for all analytical results provided to ecology for designation purposes.
- (7) "Ground-Water Monitoring List" Appendix IX to 40 CFR Part 264 is replaced with the version in Appendix 5 of *Chemical Testing Methods for Designating Dangerous Waste*, Department of Ecology Publication #97-407, March 2008. The Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods* includes the columns "Suggested methods" and "PQL."

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-110, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-110, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-110, filed 3/13/03, effective 4/13/03. 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 (except that, unless provided otherwise in an international agreement as specified in 40 CFR 262.58: See export requirements at 40 CFR 261.6 (3)(i)(A) and (B) that are incorporated by reference at WAC 173-303-230(1));
  - (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 petro-

leum 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 recyclable materials listed in (a) through (h) of this subsection 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.

In addition to these requirements, owners and operators of facilities that receive recyclable materials from off-site are subject to WAC 173-303-610 (2) and (12) and to WAC 173-303-620 (1)(e).

- (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);

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- (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); and
- (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, the department may determine on a case-by-case basis that recyclable materials received from off-site are not stored if they are moved into an active recycling process within a period of time not to exceed seventy-two hours after being received. In making such a determination, the department will consider factors including, but not limited to, the types and volumes of wastes being recycled, operational factors of the recycling process, and the compliance history of the owner or operator. 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-bycase 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 173-303-610 (2) and (12),
  - (vi) WAC 173-303-620 (1)(e),
  - (vii) WAC 173-303-630 (2) through (10), and
- (viii) WAC 173-303-640 (2) through (10) except that requirements to post-closure planning or care in WAC 173-303-640(8) will not apply to closure of recycling units. 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 con-

- tainment requirements of WAC 173-303-640(4) by January 12, 1993;
- (ix) 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.
- (6) Hazardous waste that is exported to or imported from designated member countries of the Organization for Economic Cooperation and Development (OECD) (as defined in 40 CFR 262.58 (a)(1)) for purpose of recovery is subject to the requirements of 40 CFR part 262, subpart H, if it is subject to either the manifesting requirements at WAC 173-303-180 or to the universal waste management standards of WAC 173-303-573.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-120, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-120, filed 11/30/04, effective 1/1/05; 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, as modified in (c) through (f) of this subsection, 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; 268.42(b) and 268.44 (a) through (g). The authority for implementing these excluded CFR sections remains with the U.S. Environmental Protection Agency. The word "EPA" (in 40 CFR) means "Ecology" at 40 CFR 268.44(m). The exemption and exception provisions of subsections (3) through (7) of this section are not applicable to the federal land disposal restrictions.

Where the federal regulations that have been incorporated by reference refer to 40 CFR 260.11, data provided under this section must instead meet the requirements of WAC 173-303-110.

- (b) Land disposal restrictions for state-only dangerous waste are the restrictions set forth in subsections (3) through (7) of this section.
- (c) Where 40 CFR 268.7 (a)(1) is incorporated by reference, delete the sentence "Alternatively, the generator must send the waste to a RCRA-permitted dangerous waste treatment facility, where the waste treatment facility must comply with the requirements of 264.13 of this chapter and 268.7(b) of this section."
- (d) Where 40 CFR 268.7 (a)(2) is incorporated by reference:
- (i) Delete the words "or if the generator chooses not to make the determination of whether his waste must be treated" from the first sentence; and
- (ii) Delete the sentence "(Alternatively, if the generator chooses not to make the determination of whether the waste must be treated, the notification must include the EPA Hazardous Waste Numbers and Manifest Number of the first shipment and must state 'This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination'.)"
- (e) Where 40 CFR 268.7 (b)(6) is incorporated by reference, replace the words "for the initial shipment of waste, prepare a one-time certification described in paragraph (b)(4) of this section, and a one-time notice which includes the information in paragraph (b)(3) of this section (except the manifest number)" with the words "submit a certification described in paragraph (b)(4) of this section, and a notice which includes the information listed in paragraph (b)(3) of this section (except for the manifest number) to the department for each shipment".
- (f) Where 40 CFR 268.9(d) is incorporated by reference, replace paragraph (d) with the following: Wastes that exhibit a characteristic are also subject to Section 268.7 requirements, except that once the waste is no longer dangerous, a one-time notification and certification must be placed in the generators or treaters files and sent to the department. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes and/or if the subtitle D facility receiving the waste changes. However, the generator or treater need only notify the department on an annual basis if such changes occur. Such notification and certification should be sent to the department by the end of the calendar year, but no later than December 31.
- (i) The notification must include the following information:
- (A) Name and address of the RCRA Subtitle D facility receiving the waste shipment; and
- (B) A description of the waste as initially generated, including the applicable dangerous waste code(s), treatability group(s), and underlying hazardous constituents (as defined in Sec. 268.2(i)), unless the waste will be treated and monitored for all underlying hazardous constituents. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any of the underlying hazardous constituents on the notice.

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(ii) The certification must be signed by an authorized representative and must state the language found in Section 268.7 (b)(4).

If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification found in Sec. 268.7 (b)(4)(iv) applies.

(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) The placement of bulk or noncontainerized liquid dangerous waste or dangerous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.
- (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 G21-96 (2002) Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or
- (II) The sorbent material is determined to be nonbiodegradable under OECD (Organization for Economic Cooperation and Development) test 301B: [CO<sub>2</sub> Evolution (Modified Sturm Test)].
- (v) The placement of any liquid which is not a dangerous 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 WAC 173-303-040).
- (c) Disposal of solid acid waste. No person may land dispose solid acid waste, except as provided in subsections (5),

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- (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:

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- (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. 09-14-105 (Order 07-12), § 173-303-140, filed 6/30/09, effective 7/31/09; 03-07-049 (Order 02-03), § 173-303-140, filed 3/13/03, effective 4/13/03; 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 11/8/94. 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; in eastern Washington notify the local air authority or the appropriate regional office of the department of ecology in those areas where there is no local authority.
- (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 appro-

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priate designation, treatment, storage, or disposal for any materials resulting from cleanup; 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. 09-14-105 (Order 07-12), § 173-303-145, filed 6/30/09, effective 7/31/09; 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 accumula-

- tion. (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 (for example, pouring, pumping, aspirating, etc.) and:
- (i) No more than one inch of waste remains at the bottom of the container or inner liner; or
- (ii) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons in size; or
- (iii) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size.

A container that 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.

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- (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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-160, filed 6/30/09, effective 7/31/09. 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 (lab-packs). 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 for five years 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 lab-packs 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, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-161, filed 11/30/04, effective 1/1/05. 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:

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- (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)(xiii)(A)(IV) or 173-303-600 (3)(p)(i)(D) or (3)(p)(iv), and WAC 173-303-800 (7)(c)(i)(D) or (7)(c)(i)(E) are not required to comply with the standards of WAC 173-303-170 through 173-303-230.
- (6) Any person who exports or imports hazardous waste subject to the manifesting requirements of WAC 173-303-180 or to the universal waste management standards of WAC 173-303-573, to or from the countries listed in 40 CFR 262.58 (a)(1) for recovery must comply with 40 CFR 262 subpart H. 40 CFR 262 subpart H is incorporated by reference at WAC 173-303-230(1).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-170, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-170, filed 3/13/03, effective 4/13/03. 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. A generator who transports, or offers for transport a dangerous waste for off-site treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected dangerous waste load, must follow all applicable procedures described in this section.
- (1) 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 incorporated 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.
- (a) A generator must designate on the manifest one facility that is permitted to handle the waste described on the manifest
- (b) A generator may also designate on the manifest one alternate facility that is permitted to handle his or her waste in the event an emergency prevents delivery of the waste to a primary designated facility.

- (c) If the transporter is unable to deliver the dangerous waste to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste.
- (2) The manifest must consist of enough copies to provide the generator, each transporter, and the designated facility owner/operator with a copy for their records, and another copy to be returned 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;
- (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) 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

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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.

- (6) 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).
- (7) Manifest tracking numbers, manifest printing, and obtaining manifests.
- (a) 40 CFR 262.21 (a) through (f) and (h) through (m) is incorporated by reference. EPA requirements for printing manifests for use or distribution are included in this section.
- (b) A generator may use manifests printed by any source so long as the source of the printed form has received approval from EPA to print the manifest under paragraphs (c) and (e) of 40 CFR 262.21. A registered source may be a:
  - (i) State agency;
  - (ii) Commercial printer;
  - (iii) Dangerous waste generator, transporter or TSDF; or
- (iv) Dangerous waste broker or other preparer who prepares or arranges shipments of dangerous waste for transportation.
- (c) A generator must determine whether the generator state or the consignment state for a shipment regulates any additional wastes (beyond those regulated federally) as hazardous wastes under these states' authorized programs. Generators also must determine whether the consignment state or generator state requires the generator to submit any copies of the manifest to these states. In cases where the generator must supply copies to either the generator's state or the consignment state, the generator is responsible for supplying legible photocopies of the manifest to these states.
- (8) Waste minimization certification. A generator who initiates a shipment of dangerous waste must certify to one of the following statements in Item 15 of the uniform hazardous waste manifest:
- (a) "I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to

the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment"; or

(b) "I am a medium quantity generator. I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford." Note that a Washington state medium quantity generator regulated under WAC 173-303-202 is the type of generator referred to where the manifest states "(b) if I am a small quantity generator", due to the different term used by EPA.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-180, filed 6/30/09, effective 7/31/09. 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 11/2/98, 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 the applicable United States DOT regulations on hazardous materials under 49 CFR Part 172; and
- (b) Mark each container of one hundred nineteen gallons or less of dangerous waste used in such transportation with the following, or equivalent words and information 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
Generator's EPA Identification Number Manifest Tracking Number

(4) Placarding. The generator must placard, or offer the initial transporter the appropriate placards according to

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United States DOT regulations for hazardous materials under 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 thousand 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-190, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-190, filed 11/30/04, effective 1/1/05; 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 2/10/82.1

# 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 as a storage facility unless he has been granted an extension to the ninety day period allowed pursuant to this subsection;
  - (b) The waste is placed:
- (i) In containers and the generator complies with WAC 173-303-630 (2), (3), (4), (5), (6), (8), (9), (10), and 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a). 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) In tanks and the generator complies with 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a) and 173-303-640 (2) through (10), 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) 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) 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. Where subpart G and H are referenced in 40 CFR 265.1102, replace them with WAC 173-303-610 and 173-303-620. After February 18, 1993, PE certification will be required prior to operation of the unit. The owner or operator must 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) and 173-303-610(5).

- (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

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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 173-303-335 (Construction quality assurance program) and 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 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.
- (4)(a) A generator who generates 2200 pounds or greater of dangerous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the dangerous waste code F006, may accumulate F006 waste on-site for more than ninety days, but not more than one hundred eighty days without a permit or without having interim status provided that:
- (i) The generator has implemented pollution prevention practices that reduce the amount of any dangerous sub-

- stances, pollutants or contaminants entering F006 or otherwise released to the environment prior to its recycling;
- (ii) The F006 waste is legitimately recycled through metals recovery;
- (iii) No more than 44,000 pounds of F006 waste is accumulated on-site at any one time; and
- (iv) The F006 waste is managed in accordance with the following:
  - (A) The F006 waste is placed:
- (I) In containers and the generator complies with the applicable requirements of WAC 173-303-630 (2), (3), (4), (5), (6), (8), (9), (10), and 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a); and/or
- (II) In tanks and the generator complies with the applicable requirements of 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a) and 173-303-640 (2) through (10), except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a); and/or
- (III) In containment buildings and the generator complies with subpart DD of 40 CFR part 265 which is incorporated by reference at WAC 173-303-400(3), and 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 prior to operation of the unit. The owner or operator must maintain the following records at the facility:
- A written description of procedures to ensure that the F006 waste remains in the unit for no more than one hundred eighty days, a written description of the waste generation and management practices for the facility showing that they are consistent with the one hundred eighty-day limit, and documentation that the generator is complying with the procedures; or
- Documentation that the unit is emptied at least once every one hundred eighty days.
- (B) In addition, such a generator is exempt from all the requirements in subparts G and H of 40 CFR part 265, except for 265.111 and 265.114 which are incorporated by reference at WAC 173-303-400(3).
- (C) The date upon which each period of accumulation begins is clearly marked and 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"; and
- (E) The generator complies with the requirements for owners or operators in WAC 173-303-330, 173-303-340, and 173-303-350, and with 40 CFR 268.7 (a)(5) which is incorporated by reference at WAC 173-303-140 (2)(a).
- (b) A generator who generates 2200 pounds or greater of dangerous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the dangerous waste code F006, and who must transport this waste, or offer this waste for transportation, over a distance of 200 miles or more for off-site metals recovery, may accumulate F006 waste on-site for more than ninety days, but not more than two hundred seventy days without a permit or without having interim sta-

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tus if the generator complies with the requirements of (a)(i) through (iv) of this subsection.

- (c) A generator accumulating F006 in accordance with (a) and (b) of this subsection who accumulates F006 waste on-site for more than one hundred eighty days (or for more than two hundred seventy days if the generator must transport this waste, or offer this waste for transportation, over a distance of two hundred miles or more), or who accumulates more than 44,000 pounds of F006 waste on-site is an operator of a storage facility and is subject to the facility and permit requirements of this chapter unless the generator has been granted an extension to the one hundred eighty-day (or two hundred seventy-day if applicable) period or an exception to the 44,000 pound accumulation limit. Such extensions and exceptions may be granted by the department if F006 waste must remain on-site for longer than one hundred eighty days (or two hundred seventy days if applicable) or if more than 44,000 pounds of F006 waste must remain on-site due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to thirty days or an exception to the accumulation limit may be granted at the discretion of the department on a case-by-case basis.
- (5) National environmental performance track. 40 CFR Part 262.34 (j), (k), and (l) are incorporated by reference, except that:
- (a) 262.34 (j)(3)(i) (container management) is replaced with the first sentence of WAC 173-303-200 (1)(b)(i) and 173-303-630(7) (secondary containment); and
- (b) 262.34 (j)(3)(ii) (tank standards) is replaced with WAC 173-303-200 (1)(b)(ii); and
- (c) 262.34 (j)(3)(iii) (drip pads) is replaced with WAC 173-303-200 (1)(b)(iii), except for (A) and (B); and
- (d) 262.34 (j)(6) is replaced with WAC 173-303-200 (1)(c) and (d); and
- (e) The first sentence of 262.34 (j)(7) is replaced with WAC 173-303-200 (1)(e) and (f). The second sentence is replaced with: In addition, the generator is exempt from all the requirements of WAC 173-303-610 and 173-303-620, except for WAC 173-303-610 (2) and (5). However, where drip pads are subject to closure requirements in WAC 173-303-675(6), the applicable portions of WAC 173-303-610 and 173-303-620 continue to apply.
- (6) A generator who sends a shipment of dangerous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of WAC 173-303-370(5) may accumulate the returned waste on-site in accordance with subsection (1) of this section or WAC 173-303-201, depending on the amount of dangerous waste on-site in that calendar month. Upon receipt of the returned shipment, the generator must:
- (a) Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or
- (b) Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-200, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-200, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-200, filed 3/13/03, effective 4/13/03. Stat-

utory 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 11/8/94. 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 onsite, 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 offsite 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:

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- (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 does not need to comply with 40 CFR Part 265.176 and 40 CFR Subparts AA, BB, and CC, which have been incorporated by reference at WAC 173-303-400 (3)(a).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-201, filed 11/30/04, effective 1/1/05; 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 sys

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

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- (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 Dangerous Waste Site Identification Form 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 offsite 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, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-210, filed 11/30/04, effective 1/1/05. 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.

Reporting for exports of hazardous waste is required on the annual report form. In addition, a separate annual report requirement is set forth at 40 CFR 262.56, which is incorporated by reference at WAC 173-303-230(1).

- (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,

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plans, and specifications) concerning the quantities and disposition of the generator's dangerous waste.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-220, filed 11/30/04, effective 1/1/05. 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 2/10/82.1

## **WAC 173-303-230 Special conditions.** (1) Exporting dangerous waste.

Federal export requirements, administered by EPA, are set forth at 40 CFR 262 Subparts E and H and 40 CFR 261.6 (a)(3)(i)(A) and (B), 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 dangerous waste may obtain the manifest form from any source that is registered with the U.S. EPA as a supplier of manifests (for example, states, waste handlers, and/or commercial forms printers).
- (d) In the international shipments block, the importer must check the import box and enter the point of entry (city and state) into the United States.
- (e) The importer must provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with WAC 173-303-370(3).
- (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. 09-14-105 (Order 07-12), § 173-303-230, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-230, filed 11/30/04, effective 1/1/05. 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),

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- (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 Dangerous Waste Site Identification Form according to the 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, groundwater 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 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).
- (11) A transporter of hazardous waste subject to the manifesting requirements of WAC 173-303-180 or to the universal waste management standards of WAC 173-303-573, that is being imported from or exported to any of the countries listed in 40 CFR 262.58 (a)(1) for purposes of recovery is subject to this section and to all other relevant requirements of 40 CFR subpart H part 262, including, but not limited to, 40 CFR 262.84 for tracking documents. 40 CFR subpart H is incorporated by reference at WAC 173-303-230(1).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-240, filed 11/30/04, effective 1/1/05; 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 11/8/94. 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) A transporter may not accept dangerous waste from a generator unless the transporter is also provided with a manifest signed in accordance with WAC 173-303-180(3), Manifest procedures.

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- (b) In the case of exports other than those subject to 40 CFR subpart H part 262 (which is incorporated by reference at WAC 173-303-230(1)), a transporter may not accept such waste from a primary exporter or other person if he knows the shipment does not conform to the EPA Acknowledgment of Consent; and unless, in addition to a manifest signed by the generator as provided in this section, the transporter must also be provided with an EPA Acknowledgment of Consent which, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)). For exports of hazardous waste subject to the requirements of 40 CFR subpart H part 262, a transporter may not accept hazardous waste without a tracking document that includes all information required by 40 CFR 262.84.
- (2) Before transporting a dangerous waste shipment, the transporter must sign and date the manifest, acknowledging acceptance of the dangerous waste. The transporter must 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)(a) If the dangerous waste cannot be delivered in accordance with subsection (5) of this section because of an emergency condition other than rejection of the waste by the designated facility, then the transporter must contact the generator for further directions and must revise the manifest according to the generator's instructions.
- (b) If dangerous waste is rejected by the designated facility while the transporter is on the facility's premises, then the transporter must obtain the following:
- (i) For a partial load rejection or for regulated quantities of container residues, a copy of the original manifest that includes the facility's date and signature, and the manifest tracking number of the new manifest that will accompany the shipment, and a description of the partial rejection or container residue in the discrepancy block of the original manifest. The transporter must retain a copy of this manifest in accordance with WAC 173-303-260, and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter must

- obtain a new manifest to accompany the shipment, and the new manifest must include all of the information required in WAC 173-303-370 (5)(e)(i) through (vi) or 173-303-370 (5)(f)(i) through (vi).
- (ii) For a full load rejection that will be taken back by the transporter, a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and identification number for the alternate facility or generator to whom the shipment must be delivered. The transporter must retain a copy of the manifest in accordance with WAC 173-303-260, and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter must obtain a new manifest for the shipment and comply with WAC 173-303-370 (5)(e)(i) through (vi).
- (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:

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- (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) Sign and date the manifest in the international shipments block to indicate the date that the shipment left the United States:
- (b) Retain one copy in accordance with WAC 173-303-260(3), Transporter recordkeeping;
- (c) Return a signed copy of the manifest to the generator; and
- (d) Give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-250, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-250, filed 11/30/04, effective 1/1/05. 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 record-keeping.
- (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 desig-

- nated 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) Submit a written Hazardous Materials Incident Report as required by 49 CFR 171.16 to the Information Systems Manager, PHH-63, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington D.C., 20590-0001, or an electronic Hazardous Material Incident Report to the Information System Manager, DHM-63, Research and Special Programs Administration, Department of Transportation, Washington D.C., 20590-0001 at http://hazmat.dot.gov; 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. 09-14-105 (Order 07-12), § 173-303-270, filed 6/30/09, effective 7/31/09; 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 immi-

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nent 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.

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- (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 corre-

- spondence 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
- (viii) 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 173-303-830(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 173-303-830(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

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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

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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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-281, filed 6/30/09, effective 7/31/09. 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 who seek to obtain a dangerous waste permit for waste storage and satisfy all of the following:
- (A) The facility recycles dangerous waste in a process that is exempt from dangerous waste permitting.
- (B) Waste storage is used strictly to support the exempt recycling.
- (C) Waste storage is in tanks, containers, or a containment building.
  - (D) Waste storage is indoors.
- (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.

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- (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.

- (1) "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. In addition, for the purposes of this section, a significant expansion is a single or cumulative increase of greater than twenty-five percent of the storage design capacity as described in the facility's original Part A permit application, or of the storage capacity approved for the previous significant expansion, whichever is more
- (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.

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(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 in the notice of intent.
- (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 com-

- pliance. 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

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- (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 onequarter mile from the nearest surface water intake for domestic water
- (ii) Groundwater. To the extent feasible, proponents of land-based facilities should seek sites with natural site characteristics which are capable of providing protection of groundwater resources. Natural features such as low permeability 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 groundwater protection program, WAC 173-303-806 (4)(a)(xxi), during the permitting process.
  - (A) Depth to groundwater.
- (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) Groundwater management areas. Owners/operators of facilities must identify whether the proposed facility location is within a groundwater 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 groundwater management area plans, the department may require additional protective measures or reject inconsistent projects.
  - (D) Groundwater 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 groundwater 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 groundwater intake for domestic water.
- (E) Special protection areas. Land-based facilities must not be located within groundwater 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.

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

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-282, filed 6/30/09, effective 7/31/09; 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 173-303-692.
- (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 groundwater 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. 03-07-049 (Order 02-03), § 173-303-283, filed 3/13/03, effective 4/13/03; 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)(a) 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:
- (i) Name, street address, mailing address, and telephone number of the exporter.
- (ii) Name, street address, mailing address, telephone number, and EPA/state ID number of the importer and receiving facility.
- (iii) 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.

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

- (b) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to 40 CFR part 262, subpart H (incorporated by reference at WAC 173-303-230(1)) must provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460; and to the competent authorities of all other concerned countries within three working days of receipt of the shipment. The original of the signed tracking document must be maintained at the facility for at least three years.
- (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 offsite 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, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-290, filed 11/30/04, effective 1/1/05. 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 they store, treat, or dispose of it. This analysis must contain the information necessary to manage the waste in accordance with the requirements of this chapter. The analysis must 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, or a combination of these.

- (a) When an owner or operator relies on knowledge from the generator for waste designation or for this detailed analysis (commonly known as a waste profile) instead of analytical testing of a sample, that information must be documented and must meet the definition of "knowledge" as defined in WAC 173-303-040. To confirm the sufficiency and reliability of the "knowledge" used for the waste profile, the facility must do one or more of the following:
- (i) Be familiar with the generator's processes by conducting site visits, and reviewing sampling data and other information provided by the generator to ensure they are adequate for safe management of the waste;
- (ii) Ensure waste analysis contained in documented studies on the generator's waste is based on representative and appropriate sampling and test methods;
- (iii) Compare the generator's waste generating process to documented studies of similar waste generating processes to ensure the waste profile is accurate and current;
- (iv) Obtain other information as predetermined by the department on a case-by-case basis to be equivalent.
- (b) As required in WAC 173-303-380 (1)(c), records must be retained containing specific information that show compliance with this subsection for sufficient and reliable information on the waste whether the owner or operator relies on analytical testing of the waste or knowledge from the generator, or a combination of these.
- (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;

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- (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 173-303-400 (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. Note that data provided from laboratory analyses for WAC 173-303-400(3) which incorporates by reference 40 CFR Part 265 Subparts F through R, WAC 173-303-140 (4)(b), 173-303-395(1), 173-303-630 through 173-303-670, 40 CFR 268.4(a) and 268.7 must meet the requirements of WAC 173-303-110;
- (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 and WAC 173-303-910(3) 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):
- (i) 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.
- (ii) 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 offsite 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-300, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-300, filed 11/30/04, effective 1/1/05; 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. 98-02-018 (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 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 prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of his or her facility, unless he can demonstrate to the department that:
- (a) Physical contact with waste, structures, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock which may enter the active portion of a facility; and
- (b) Disturbance of the waste or equipment by the unknowing or unauthorized entry of persons or livestock onto the active portion of the facility will not cause a violation 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. 09-14-105 (Order 07-12), § 173-303-310, filed 6/30/09, effective 7/31/09; 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.]

(6/30/09) [Ch. 173-303 WAC—p. 71]

- 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) The schedule must be kept 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, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-320, filed 11/30/04, effective 1/1/05; 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 con-

- tingency 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

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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 groundwater 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, twoway 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:

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- (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 groundwater 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, they 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. The owner or operator may develop one contingency plan that meets all regulatory requirements. Ecology recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan") as found at www.nrt.org. When modifications are made to nondangerous waste (non-Hazardous Waste Management Act or nondangerous waste regulation) provisions in an integrated contingency plan, the changes do not trigger the need for a dangerous waste permit modification.
  - (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 (6), 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

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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. 09-14-105 (Order 07-12), § 173-303-350, filed 6/30/09, effective 7/31/09; 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

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- (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. If a facility receives dangerous waste accompanied by a manifest, the owner, operator, or his/her agent must sign and date the manifest as indicated in subsection (2) of this section to certify that the dangerous waste covered by the manifest was received, that the dangerous waste was received except as noted in the discrepancy space of the manifest, or that the dangerous waste was rejected as noted in the manifest discrepancy space.

- (2) If a facility receives dangerous waste shipment accompanied by a manifest, the owner, operator, or their agent, must:
  - (a) Sign and date, by hand, each copy of the manifest;
- (b) Note any discrepancies (as defined in subsection (5)(a) of this section) on each copy of the manifest;
- (c) Immediately give the transporter at least one copy of the manifest:
- (d) Within thirty days of 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 hazardous waste imported from a foreign source, the receiving facility must mail a copy of the manifest to the following address within thirty days of delivery: International Compliance Assurance Division, OFA/OECA (2254A), U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460.
- (4) 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 or her 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 (5) 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 a signed and dated copy of the shipping paper (if the manifest has not been received within thirty days after delivery) 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.
  - (5) Manifest discrepancies.
  - (a) Manifest discrepancies are:
- (i) Significant differences (as defined in (b) of this subsection) between the quantity or type of dangerous waste designated on the manifest or shipping paper, and the quantity and type of dangerous waste a facility actually receives;
- (ii) Rejected wastes, which may be a full or partial shipment of dangerous waste that the TSDF cannot accept; or
- (iii) Container residues, which are residues that exceed the quantity limits for "empty" containers set forth in WAC 173-303-160(2).
- (b) Significant differences in quantity are: For bulk waste, variations greater than ten percent in weight (for example, tanker trucks, railroad tank cars, etc.); for batch waste, any variations in piece count, such as a discrepancy of one drum in a truckload. Significant differences in type are obvious differences which can be discovered by inspection or waste analysis such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.
- (c) Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste generator or 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.
- (d)(i) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for "empty" containers set forth in WAC 173-303-160(2), the facility must consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible

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- to locate an alternative facility that can receive the waste, the facility may return the rejected waste or residue to the generator. The facility must send the waste to the alternative facility or to the generator within sixty days of the rejection or the container residue identification.
- (ii) While the facility is making arrangements for forwarding rejected wastes or residues to another facility under this section, it must ensure that either the delivering transporter retains custody of the waste, or the facility must provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest prepared under (e) or (f) of this subsection.
- (e) Except as provided in (e)(vii) of this section, for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility is required to prepare a new manifest in accordance with WAC 173-303-180 and the following instructions:
- (i) Write the generator's U.S. EPA/state ID number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5
- (ii) Write the name of the alternate designated facility and the facility's U.S. EPA ID number in the designated facility block (Item 8) of the new manifest.
- (iii) Copy the manifest tracking number found in Item 4 of the old manifest to the special handling and additional information block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
- (iv) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the discrepancy block of the old manifest (Item 18a).
- (v) Write the DOT description for the rejected load or the residue in Item 9 (U.S. DOT Description) of the new manifest and write the container types, quantity, and volume(s) of waste.
- (vi) Sign the generator's/offeror's certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
- (vii) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the alternate facility space. The facility must retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with (e)(i), (ii), (iii), (iv), (v), and (vi) of this subsection.
- (f) Except as provided in (f)(vii) of this subsection, for rejected wastes and residues that must be sent back to the generator, the facility is required to prepare a new manifest in accordance with WAC 173-303-180 and the following instructions:
- (i) Write the facility's U.S. EPA ID number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address

- is different from the generator's site address, then write the generator's site address in the designated space for Item 5.
- (ii) Write the name of the initial generator and the generator's U.S. EPA ID number in the designated facility block (Item 8) of the new manifest.
- (iii) Copy the manifest tracking number found in Item 4 of the old manifest to the special handling and additional information block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
- (iv) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the discrepancy block of the old manifest (Item 18a).
- (v) Write the DOT description for the rejected load or the residue in Item 9 (U.S. DOT Description) of the new manifest and write the container types, quantity, and volume(s) of waste.
- (vi) Sign the generator's/offeror's certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
- (vii) For full load rejections that are made while the transporter remains at the facility, the facility may return the shipment to the generator with the original manifest by completing Item 18a and 18b of the manifest and supplying the generator's information in the alternate facility space. The facility must retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with (f)(i), (ii), (iii), (iv), (v), and (vi) of this subsection.
- (g) If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for "empty" containers set forth in WAC 173-303-160(2) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility must amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility must also copy the manifest tracking number from Item 4 of the new manifest to the discrepancy space of the amended manifest, and must re-sign and date the manifest to certify to the information as amended. The facility must retain the amended manifest for at least three years from the date of amendment, and must within thirty days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended.
- (6) 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 (5) 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).

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- (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).
- (7) Within three working days of the receipt of a shipment subject to 40 CFR part 262, subpart H (which is incorporated by reference at WAC 173-303-230(1)), the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460, and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.
- (8) A facility must determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated federally) as hazardous wastes under its state hazardous waste program. Facilities must also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-370, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-370, filed 11/30/04, effective 1/1/05; 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 40 CFR Parts 264 and 265, 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. Note that data from laboratory analyses for 40 CFR 268.4(a) and 268.7 must meet the requirements of WAC 173-303-110:
- (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 (incorporated by reference at WAC 173-303-400(3)), 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 (incorporated by reference at WAC 173-303-690, 173-303-691, and 173-303-692). Note that data provided from laboratory analyses for WAC 173-303-400(3) which incorporates by reference 40 CFR Part 265 Subparts F through R, WAC 173-303-140 (4)(b), 173-303-395(1), 173-303-630 through 173-303-680, 173-303-693 and 173-303-695, 40 CFR 268.4(a) and 268.7 must meet the requirements of WAC 173-303-110;
- (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, 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;
- (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;
- (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;
- (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;
- (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;
- (o) For an on-site storage facility, the information contained in the notice (except the manifest number), and the

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certification and demonstration if applicable, required by the generator or the owner or operator under 40 CFR 268.7;

- (p) Any records required under WAC 173-303-280(6); and
- (q) A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that they generate to the degree determined by the permittee to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.
- (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 <sup>1</sup>
Gallons	G
Gallons per Hour	E
Gallons per Day	U
Liters	L
Liters per Hour	Н
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	В
Acres-feet	Α
Hectares	Q
Hectare-meter	F
Btus per Hour	I
Tons (2000 lbs)	M

Footnote: 

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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-380, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-380, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-380, filed 3/13/03, effective 4/13/03. 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 without an accompanying shipping paper as described in WAC 173-303-370(3) for water (bulk shipment) transporters, and if the waste is not excluded from the manifest requirements by this chapter, then the owner or operator must prepare and submit a letter to the department within fifteen days after receiving the waste. Submit the letter to the appropriate department of ecology regional office. The letter is the unmanifested waste report, and must contain 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 or her 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 facilities, 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);
- (g) For generators who treat, store, or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;
- (h) For generators who treat, store, or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984; and
- (i) 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 groundwater 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-390, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-390, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-390, filed 3/13/03, effective 4/13/03. 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 compli-

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- (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 International 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:

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- (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 con-

tainers, 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, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-395, filed 11/30/04, effective 1/1/05. 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 (that is, 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) The owner or operator of a facility managing recyclable materials described in WAC 173-303-120 (2), (3), and (5) (except to the extent that they are referred to in WAC 173-303-515 or 173-303-505, 173-303-520, 173-303-525, or 40 CFR Part 266 subpart H);
- (iii) The owner or operator of a POTW who treats, stores, or disposes of dangerous wastes, provided that he has

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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);
- (B) Mercury-containing equipment as described in WAC 173-303-573(3); and
  - (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 activi-

- ties during immediate response to any of the following situa-
  - (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.
- (xiv) The owner or operator of a facility that is permitted to manage solid waste pursuant to chapter 173-350 WAC, if the only dangerous waste the facility manages is excluded from regulation under this chapter by WAC 173-303-070(8).
- (xv) A farmer disposing of waste pesticides from his own use provided he complies with WAC 173-303-160 (2)(b).
  - (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

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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, CC, 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) 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 (a) through (g).
  - (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), 40 CFR 265.118 (c)(4), 40 CFR 265.121 and 40 CFR 265.1080 (e) and (f).
- (iii) Where 40 CFR 265 Subparts F through R, W, DD, and EE have been incorporated by reference refer to 40 CFR

- 260.11, data provided under this section must instead meet the requirements of WAC 173-303-110.
- (iv) "Subpart B general facility standards." References to "EPA" in 40 CFR 265.19, means the "department." Additionally, references to "administrator" means the "director."
  - (v) "Subpart F groundwater monitoring."
- (A) Section 265.90 (d)(1) is modified by adding the following sentence. "A copy of the plan must be submitted to the department,"
- (B) Section 265.90 (d)(3) is modified by adding the following sentence. "A copy of the plan must be submitted to the department,"
- (C) Section 265.91(c) includes the requirement that: "Groundwater monitoring wells must be designed, constructed, and operated so as to prevent groundwater contamination. Chapter 173-160 WAC may be used as guidance in the installation of wells",
- (D) Section 265.93 (d)(2) is modified by adding the following sentence. "A copy of the plan must be submitted to the department," and
- (E) Section 265.93 (d)(5) is modified by adding the following sentence. "A copy of the report must be submitted to the department within 15 days."
  - (vi) "Subpart G closure and post-closure."
- (A) The third sentence in section 265.112 (d)(1) is modified to read "The owner or operator must submit the closure plan to the department at least 45 days prior to the date on which they expect to begin closure of a tank, container storage, or incinerator unit, or final closure of a facility with only such units."
- (B) The sixth sentence of section 265.112 (d)(1) is modified to read "Owners or operators with approved closure plans must notify the department in writing at least 45 days prior to the date on which they expect to begin closure of a tank, container storage, or incinerator unit, or final closure of a facility with only such units." The first sentence of 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, 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." In addition, the clean-up levels for removal or decontamination set forth at WAC 173-303-610 (2)(b) apply.
- (C) Section 265.113 (e)(5) is modified by changing "annual reports" to "semi-annual reports."
- (D) Section 265.115 is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (E) Section 265.120 is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
  - (vii) "Subpart H financial requirements."
- (A) An additional sentence that 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."

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- (B) 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."
- (C) Section 265.143(h) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (D) Section 265.145(h) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (E) Section 265.147(e) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (F) The following sections and any cross-reference to these sections are not incorporated by reference: 40 CFR Parts 265.149 and 265.150;
  - (viii) "Subpart I use and management of containers."

Section 265.174 is modified by replacing the paragraph with the following. "The owner or operator must inspect areas where containers are stored, at least weekly, looking for leaks and for deterioration caused by corrosion or other factors."

- (ix) "Subpart J tank systems."
- (A) 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.
- (B) Section 265.191(a) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (C) Section 265.191 (b)(5)(ii) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (D) Section 265.192(a) introductory text is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (E) Section 265.192(b) introductory text is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (F) 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).
- (G) Section 265.193 (i)(2) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (H) Section 265.195(b) is modified by deleting the words "Except as noted under the paragraph (c) of this section"
- (I) Section 265.195 is modified by deleting paragraphs (c) and (d).
- (J) Section 265.196(f) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer" and by adding the following sentence. "A copy of the plan must be submitted to the depart-

- ment within seven days after returning the tank system to use "
- (K) Section 265.201(c) is modified by deleting the words "Except as noted in paragraph (d) of this section."
- (L) Section 265.201 is modified by deleting paragraphs (d) and (e).
- (x) "Subpart K surface impoundments." Section 265.224(a) is modified by adding the following sentence. "A copy of the plan must be submitted to the department when submitting the proposed action leakage rate under section 265.222."
- (xi) "Subpart L waste piles." Section 265.259(a) is modified by adding the following sentence. "A copy of the response action plan must be submitted to the department when submitting the proposed action leakage rate under section 265.255."
  - (xii) "Subpart M land treatment."
- (A) Section 265.273(b) is modified by replacing the words "Part 261, Subpart D of this chapter" with "WAC 173-303-080":
- (B) Section 265.280(e) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
  - (xiii) "Subpart N landfills."
- (A) An additional sentence reads: "An owner/operator must not landfill an organic/carbonaceous waste or an EHW, as defined by WAC 173-303-080 through 173-303-100, except at the EHW facility at Hanford" as allowed under WAC 173-303-700 or as allowed under WAC 173-303-140(4).
- (B) Section 265.303(a). "A copy of the response action plan must be submitted to the department when submitting the proposed action leakage rate under section 265.302."
  - (xiv) "Subpart O incinerators."
  - (xv) "Subpart P thermal treatment."
- (xvi) "Subpart Q chemical, physical and biological treatment."
- (xvii) "Subpart R underground injection." An additional sentence 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."
  - (xviii) "Subpart W drip pads."
- (A) Section 265.441(a) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (B) Section 265.441(b) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (C) Section 265.441(c) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (D) Section 265.443 (a)(4)(ii) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (E) Section 265.443(g) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (F) 265.444(a) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

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- (xix) "Subpart AA air emission standards for process vents."
- (xx) "Subpart BB air emission standards for equipment leaks."
- (A) Section 265.1061 is modified by adding (d) "If an owner or operator decides no longer to comply with this section, the owner or operator must notify the department in writing that the work practice standard described in 265.1057 (a) through (e) will be followed."
- (B) Section 265.1061(b) is modified by adding (b)(3) "An owner or operator must notify the department that the owner or operator has elected to comply with the requirements of this section."
- (C) Section 265.1062(a) is modified by adding the sentence "An owner or operator must notify the department before implementing one of the alternative work practices."
- (xxi) "Subpart CC air emission standards for tanks, surface impoundments, and containers."
  - (xxii) "Subpart DD containment buildings."
- (A) Section 265.1101 (c)(2) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."
- (B) Section 265.1101 (c)(4) is modified by deleting the words "except for Performance Track member facilities, that must inspect up to once each month, upon approval of the director" and deleting the last sentence of the paragraph.
- (xxiii) "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 hazard-ous 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-400, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-400, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-400, filed 3/13/03, effective 4/13/03. 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 stateonly 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. (Also, see WAC 173-303-120 (3) and (5).)

- (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 offsite 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:

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- (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. 03-07-049 (Order 02-03), § 173-303-500, filed 3/13/03, effective 4/13/03; 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. (Also, see WAC 173-303-120(3).)

- (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.
- (ii) Antiskid/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.
- (iii) Fertilizers that contain recyclable materials are not subject to regulation provided that:
- (A) They are zinc fertilizers excluded according to WAC 173-303-071 (3)(pp); or
- (B) They meet the applicable treatment standards in subpart D of Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a) for each hazardous waste that they contain.

(Note: Fertilizers that contain recyclable material derived from state-only waste must also meet the treatment standards in WAC 173-303-140 (2)(a) that apply to the characteristics of dangerous waste that the state-only waste exhibits.)

(iv) 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 informa-

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tion described in (b)(iv)(A) or (B) of this subsection. However, the information requirements in (b)(v)(A) of this subsection may not be required if: The registrant provides documentation that the fertilizer has been previously registered in Washington state two or more times using the information in (b)(v)(A) of this subsection, and the source materials used to manufacture the product have not changed.

- (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.
- (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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-505, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-505, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-505, filed 3/13/03, effective 4/13/03. 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 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. (Also, see WAC 173-303-120(3).)
- (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 onsite);
- (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.
- (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. 09-14-105 (Order 07-12), § 173-303-506, filed 6/30/09, effective 7/31/09; 03-07-049 (Order 02-03), § 173-303-506, filed 3/13/03, effective 4/13/03; 95-22-008 (Order 94-30), § 173-303-506, filed 10/19/95, effective 11/19/95. Statutory

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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. (Also, see WAC 173-303-120(3).)

- (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.) In addition, the following are incorporated by reference for boilers and industrial furnaces that burn hazardous waste: 40 CFR 266.100 (b)(1), 266.100 (b)(2), 266.100 (b)(3), 266.100 (d)(1), 266.100 (d)(3) intro, and 266.100(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 (and not EHW) through the criteria of WAC 173-303-100.

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 or a waste designated as EHW through the criteria of WAC 173-303-100 (6)(b) and (c) 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:

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- (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

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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 record-keeping 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-510, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-510, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-510, filed 3/13/03, effective 4/13/03. 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. In addition, the test methods at WAC 173-303-110(3) must be used.

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 except that the test methods at WAC 173-303-110(3) must be used.

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 Cadmium Chromium Lead Flash point Total halogens	5 ppm maximum 2 ppm maximum 10 ppm maximum 100 ppm maximum 100° F minimum 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 WPCB 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.

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- (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 except that the test methods at WAC 173-303-110(3) must be used. 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 rerefiners.** For the purpose of managing materials under this section, 40 CFR Parts 279.50 through 279.59 are incorporated by reference except that the test methods at WAC 173-303-110(3) must be used. The standards for used oil processors and rerefiners 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, owners and operators of used oil processing and/or rerefining facilities regulated under this subsection are subject to the following:
- (i) Used oil and other materials managed under the standards for management of used oil 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;
- (ii) Facility closure standards of WAC 173-303-610 (2) and (12); and
  - (iii) Financial requirements of WAC 173-303-620 (1)(e).
- (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-products (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.

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- (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 except that the test methods at WAC 173-303-110(3) must be used.
- (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

#### (13) Testing required.

- (a) Notwithstanding any other provisions of this section, the department may require any person to test their used oil according to the methods set forth in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication, SW-846* to either determine if the used oil is on-specification as described in WAC 173-303-515(4), determine whether the used oil contains a listed hazardous waste, or determine if the used oil is prohibited from being managed as used oil in WAC 173-303-515(5).
- (b) Where the federal regulations that have been incorporated by reference refer to 40 CFR 260.11, data provided under this section must instead meet the requirements of WAC 173-303-110(3).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-515, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-515, filed 11/30/04, effective 1/1/05; 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"). (Also, see WAC 173-303-120(3).)
- (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 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-520, filed 3/13/03, effective 4/13/03. 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. (Also, see WAC 173-303-120(3).)
- (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.

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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(6).

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 ecology approved case-by-case seventy-two hour storage of spent antifreeze occurs prior to reclamation.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-522, filed 6/30/09, effective 7/31/09; 03-07-049 (Order 02-03), § 173-303-522, filed 3/13/03, effective 4/13/03. 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. (Also, see WAC 173-303-120(3).)

- (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); and
- (iii) For precious metals exported to or imported from designated OECD member countries for recovery, 40 CFR subpart H of part 262 (incorporated by reference at WAC 173-303-230(1)) and 173-303-290 (1)(b). For precious metals exported to or imported from non-OECD countries for recovery, 40 CFR subpart E (incorporated by reference at WAC 173-303-230(1)) and 173-303-230(2).
- (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

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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, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-525, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-525, filed 3/13/03, effective 4/13/03. 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) Mercury-containing equipment 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 (for example, when sent for reclamation).
- (ii) An unused battery becomes a waste on the date the handler decides to discard it.
  - (3) Applicability—Mercury-containing equipment.
- (a) Mercury-containing equipment covered under this section. The requirements of this section apply to persons managing mercury-containing equipment, as described in WAC 173-303-040, except those listed in (b) of this subsection.
- (b) Mercury-containing equipment not covered under this section. The requirements of this section do not apply to persons managing the following mercury-containing equipment:
- (i) Mercury-containing equipment that is not yet a waste under WAC 173-303-016, 173-303-017, or 173-303-070. Paragraph (c) of this subsection describes when mercury-containing equipment becomes a waste;
- (ii) Mercury-containing equipment that is not a dangerous waste. Mercury-containing equipment 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; and
- (iii) Equipment and devices from which the mercury-containing components have been removed.
  - (c) Generation of waste mercury-containing equipment.
- (i) Used mercury-containing equipment becomes a waste on the date it is discarded.
- (ii) Unused mercury-containing equipment becomes a waste on the date the handler decides to discard it.
  - (4) Reserve.
  - (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.

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- (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 (for example, 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 mercury-containing equipment. A small quantity handler of universal waste must manage universal waste mercury-containing equipment 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 place in a container any universal waste mercury-containing equipment with noncontained elemental mercury or that shows 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 device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.
- (ii) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:
- (A) Removes the ampules in a manner designed to prevent breakage of the ampules;
- (B) Removes the ampules only over or in a containment device (for example, 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 that 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 small quantity handler of universal waste mercury-containing equipment that does not contain an ampule

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may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

- (A) Immediately seals the original housing holding the mercury with an airtight seal to prevent the release of any mercury to the environment; and
- (B) Follows all requirements for removing ampules and managing removed ampules under (b)(ii) of this subsection; and
- (iv)(A) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing 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 or housings (for example, the remaining mercury-containing device).
- (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 (that is, 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)(i) Universal waste mercury-containing equipment (that is, each device), or a container in which the equipment is contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste Mercury-Containing Equipment," "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."
- (ii) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases "Universal Waste-Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."
- (c) Universal waste lamps (that is, 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, mercury-containing equipment, 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.

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#### (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 other than to those OECD countries specified in 40 CFR 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 CFR part 262, subpart H which is incorporated by reference at WAC 173-303-230) 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;

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- (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 (for example, batteries, thermostats, mercurycontaining equipment, and lamps); and
- (v) A statement indicating that the handler is accumulating more than 11,000 pounds of universal waste at one time, 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 4,000 pounds of batteries, 4,500 pounds of thermostats, 2,000 pounds of mercury-containing equipment 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 1,000 pounds of batteries, 4,000 pounds of thermostats, 2,000 pounds of mercury-containing equipment 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 (for example, 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 mercury-containing equipment. A large quantity handler of universal waste must manage universal waste mercury-containing equipment 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 place in a container any universal waste mercury-containing equipment with noncontained elemental mercury or that shows 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 device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.
- (ii) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:
- (A) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;
- (B) Removes ampules only over or in a containment device (for example, 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 of broken ampules, from that 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;
- (iii) A large quantity handler of universal waste mercurycontaining equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:
- (A) Immediately seals the original housing holding the mercury with an airtight seal to prevent the release of any mercury to the environment; and
- (B) Follows all requirements for removing ampules and managing removed ampules under (b)(ii) of this subsection; and
- (iv)(A) A large quantity handler of universal waste who removes mercury-containing ampules from mercury-contain-

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ing equipment or seals mercury from mercury-containing equipment in its original housing 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 or housings (for example, the remaining mercury-containing device).
- (B) If the mercury, residues, and/or other solid waste exhibits 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 in compliance with 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 (that is, each battery), or a container or tank 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)(i) Mercury-containing equipment (that is, each device), or a container in which the equipment is contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."
- (ii) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of

- the following phrases: "Universal Waste-Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."
- (c) Universal waste lamp (that is, 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, mercury-containing equipment, 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

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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, mercury-containing equipment, 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, mercury-containing equipment, 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 other than to those OECD countries specified in 40 CFR 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 CFR part 262, subpart H which is incorporated by reference at WAC 173-303-230) 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

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(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 applicable 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 other than to those OECD countries specified in 40 CFR 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 CFR part

- 262, subpart H which is incorporated by reference at WAC 173-303-230) 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 173-303-695, 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;

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- (ii) The quantity of each type of universal waste received (for example, batteries, thermostats, mercury-containing equipment, or lamps);
- (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 in (a) through (c) of this subsection:

- (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.
- (d) Persons managing universal waste that is imported from an OECD country as specified at 40 CFR 262.58 (a)(1), which is incorporated by reference at WAC 173-303-230(1), are subject to (a) through (c) of this subsection, in addition to the requirements of 40 CFR part 262 subpart H, which is incorporated by reference at WAC 173-303-230(1).
- (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 (for example, 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 (for example, dangerous waste batteries).) Thus, only the portion of the waste stream that does exhibit one or more characteristics or criteria (that is, 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 (for example, 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 (for example, 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 (for example, 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.
- (41) 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.

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(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.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-573, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-573, filed 11/30/04, effective 1/1/05; 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(10), 173-303-400 (2)(c)(xiii), 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

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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.
  - (d) Waste chemical munitions.
- (i) Waste military munitions that are chemical agents or chemical munitions and that exhibit a hazardous waste characteristic or are listed as hazardous waste under WAC 173-303-070, are listed or identified as a hazardous waste and are

- subject to the applicable regulatory requirements of RCRA subtitle C and the Hazardous Waste Management Act.
- (ii) Waste military munitions that are chemical agents or chemical munitions and that exhibit a hazardous waste characteristic or are listed as hazardous waste under WAC 173-303-070, are not subject to the storage prohibition in RCRA section 3004(j), codified at 40 CFR 268.50 (which is incorporated by reference at WAC 173-303-140 (2)(a)).
- (e) Amendments to DDESB storage standards. The DDESB storage standards applicable to waste military munitions, referenced in subsection (4)(a)(i) of this section, are DOD 6055.9-STD ("DOD Ammunition and Explosive Safety Standards"), in effect on November 8, 1995, except as provided in the following sentence. Any amendments to the DDESB storage standards will become effective for purposes of subsection (4)(a)(i) of this section on the date the Department of Defense publishes notice in the Federal Register that the DDESB standards referenced in subsection (4)(a)(i) of this section have been amended.

# (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 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-578, filed 3/13/03, effective 4/13/03. 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 173-350 WAC, if

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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(6);
- (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) Mercury-containing equipment 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-600, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-600, filed 11/30/04, effective 1/1/05; 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

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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) Owners and operators of off-site recycling facilities subject to WAC 173-303-120 (3) or (4), and off-site used oil processors subject to regulation under WAC 173-303-515(9) are subject to:
- (i) WAC 173-303-610(2) Closure performance standard; and
- (ii) WAC 173-303-610(12) Off-site recycling and used oil processor closure plans.
- (d) 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.
- (e) 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 runoff, or dangerous waste decomposition products to the ground, surface water, groundwater, 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, groundwater, surface water, and air, the numeric cleanup levels calculated using unrestricted use exposure assumptions according to the Model Toxics Control Act Regulations, chapter 173-340 WAC as of the effective date 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 department upon request, including request by mail until final closure is completed and certified in accordance with subsection (6) of this section. The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include at least:
- (i) A description of how each dangerous waste management unit at the facility will be closed in accordance with subsection (2) of this section;

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- (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, groundwater monitoring, leachate collection, and run-on and runoff 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) (e) 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) (e) 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 they expect 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 they expect to begin closure of a treatment or storage tank, container storage, or incinerator unit, or final closure of a facility with only such units.
- (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

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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;
- (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

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- (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, groundwater 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 groundwater 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 groundwater 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 groundwater protection standard or background levels if the facility has not yet established a groundwater 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

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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 qualified registered professional engineer. Documentation supporting the independent qualified 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) Groundwater 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 groundwater 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 groundwater 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 groundwater 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) (e) 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.

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- (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 to apply alternative requirements under subsection (1) (e) 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

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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 qualified registered professional engineer. Documentation supporting the independent qualified 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).
- (12) Off-site recycling and used oil processor closure plans. The owner or operator of an off-site recycling facility subject to regulation under WAC 173-303-120 (3), (4), or used oil processor or rerefiner subject to WAC 173-303-515(9) must have a written closure plan.
- (a) Submittal. For new facilities, the closure plan must be submitted with the notification required under WAC 173-303-060. For existing facilities, the closure plan must be submitted within one hundred eighty days of the effective date of this regulation. For closure plans denied under (b) of this subsection that will be resubmitted, the amended plan must be resubmitted within ninety days after the owner or operator receives the denial.
- (b) Review by department. Decision to approve or deny. Closure plans must be submitted to department for review, comment, approval or denial. The department decision to approve a closure plan must assure it is consistent with requirements in subsections (2) and (12) of this section. The department decision to deny a closure plan must be justified on the inability or unwillingness of the owner and operator to meet requirements in subsections (2) and (12) of this section or WAC 173-303-620 (1)(e). The department's decision may be appealed under the provisions of WAC 173-303-845.
- (c) Availability. A copy of the approved closure plan and all updates to the plan must be maintained at the facility and furnished to the department upon request, including request by mail, until final closure is completed and certified in accordance with subsection (6) of this section.
- (d) Contents of plan. The closure plan must identify steps necessary to perform final closure of recycling units at any point during its active life. The closure plan must include at least:

- (i) An estimate of the maximum inventory of dangerous wastes or used oil ever on-site over the active life of the facility:
- (ii) Descriptions, schedules, and disposal or decontamination procedures in subsections (3), (4), (5), (6) of this section, except any provisions dealing with permits, permit applications, modifications or approvals. The term "recycling unit" will replace the terms "dangerous waste management unit" or "regulated unit" in these subsections. Any references to permits or permit modifications in these subsections do not apply.
- (e) Obligation to amend. At least sixty days prior to a major change at an off-site recycling or used oil processor/rerefining facility, the owners/operator of that facility must submit an amended closure plan. A major change may include the addition of a recycling or recovery process that is subject to WAC 173-303-120 (3) or (4), any increase in the maximum inventory of dangerous waste or used oil described in the previously approved closure plan, the closure of an existing recycling unit, or a change in ownership or operational control. The department must approve or deny, with justification, the revised closure plan. Refer to (a) of this subsection when a closure plan is denied if the closure plan needs to be resubmitted. Alternatively, the owner or operator may challenge the denial pursuant to WAC 173-303-845.
- (f) Notification of closure. At least forty-five days prior to closure, an owner/operator must provide written notice to department of intent to close.
- (g) Relationship to closure plans for permitted facilities. A facility owner/operator that is subject to permitting and closure planning requirements for storage, treatment or disposal that is also required to prepare a closure plan for off-site recycling or used oil processing/rerefining, may satisfy the requirements of this subsection by combining all closure requirements in a single closure plan.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-610, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-610, filed 11/30/04, effective 1/1/05; 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;

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- (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 groundwater 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.
- (e) Except as provided in (c) of this subsection, the requirements of subsections (3), (4), (8), (9) and (10) of this section apply to owners and operators of off-site recycling facilities and processors/rerefiners of used oil, except the term "recycling unit" will replace the terms "dangerous waste management unit" or "regulated unit."
- (i) If the closure plan for an off-site recycling or used oil processing/rerefining facility has not been approved by the department within one year of submittal to the department, the department may determine the closure cost estimate and direct the facility to establish financial assurance in that amount. Note that the schedule for partially funded trust funds for existing facilities of WAC 173-303-620 (4)(c)(i) may apply.
- (ii) Relationship to closure cost estimates and financial responsibility for permitted facilities. A facility owner/operator that is subject to closure cost estimating and financial responsibility requirements for dangerous waste management units and recycling unit may choose to consolidate those requirements into a single mechanism for submittal to the department.
- (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), or for off-site recycling or used oil processing facilities prepared in accordance with WAC 173-303-610(12);
- (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;

Except that, off-site recyclers subject to WAC 173-303-120 (3) or (4), or off-site used oil processors subject to WAC 173-303-515(9) may exclude the estimated value for certain types of recyclable materials from the estimated cost of closing a recycling unit. This exclusion may include dangerous wastes or used oil held in tanks or containers that are dedicated solely to the management of recyclable materials that will require only incidental processing prior to producing a product that may be sold to the general public. Incidental processing may include simple screening or filtering to remove minor amounts of foreign material or removal of less than five percent water by volume; 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

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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, or off-site recycling or used oil processing/rerefining 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 for the mechanisms listed above as 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.
- (c) An owner or operator of an off-site recycling or used oil processing/rerefining facility may also meet the requirements of this subsection through the use of an assigned security deposit held in a Washington state bank. This mechanism is not available to an owner or operator of a TSD.
- (i) The department will establish minimum standards for the assigned security deposit mechanism. These standards will include, but are not limited to, the language to be used in the assignment form. Copies of the assignment forms will be available from the department.
- (ii) The department is not required to accept an assigned security deposit that does not meet the established minimum standards.

- (d) 40 CFR 264.143 is modified by the following requirements:
- (i) Partially funded trust funds of 264.143 (a)(3) may not be accepted as a mechanism for a closure trust fund for TSDs. Owners and operators of existing used oil and recycling units that become subject to this section may establish a partially funded closure trust fund with a pay-in period of five years. The fund must be fully funded no later than five years (and the first, second, third, fourth, and fifth payments due no later than one, two, three, four, and five year(s) respectively) after the date of the department's approval of the closure plan under WAC 173-303-610 (12)(b);
- (ii) Insurance companies providing closure coverage must have a current rating of financial strength of:
- (A) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;
  - (B) Aaa, Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or
  - (C) A++, A+, A, A-, B++, B+ as rated by A.M. Best;
- (iii) Ecology must be named as secondary beneficiary on an insurance policy;
- (iv) Facility owners/operators and corporate guarantors requesting the use of the financial test and corporate guarantee must meet a minimum tangible net worth criterion of twenty million dollars.
- (e) Owners and operators of off-site recycling facilities regulated under WAC 173-303-120 (3) or (4), or used oil processing/rerefining facilities regulated under WAC 173-303-515(9), must demonstrate financial assurance for closure of the facility or recycling units. In addition to the requirements of 40 CFR 264.143, as amended by this subsection, the financial assurance must meet the following requirements:
- (i) For existing facilities choosing a surety bond guaranteeing payment, surety bond guaranteeing performance, letter of credit, insurance, financial test, corporate guarantee, or assigned security deposit, the mechanism must be established within thirty-six months of the effective date of this section;
- (ii) Owners and operators of existing facilities choosing a partially funded trust fund mechanism must establish a fully funded trust fund within sixty months of approval of the closure plan by the department (see (c)(i) of this subsection);
- (iii) For new facilities, financial assurance must be established and submitted to the department at least sixty days prior to the acceptance of the first shipment of wastes.
- (f) Owners and operators of off-site recycling facilities regulated under WAC 173-303-120 (3) or (4), or used oil processing/rerefining facilities regulated under WAC 173-303-515(9) may request an alternative mechanism for financing the closure of recycling units that is determined by the department to be equivalent to one of the methods listed in (a) of this subsection. This may include any alternative mechanism as may be established through action by the Washington state legislature. An assigned security deposit that meets the department's standards is an equivalent alternative mechanism within the meaning of this section.
- (5) Cost estimate for post-closure monitoring and maintenance.
- (a) The owner or operator of a facility subject to postclosure monitoring or maintenance requirements must have a detailed written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in

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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 postclosure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before the submission of updated information to the department as specified in subsection (6) of this section. The adjustment may be made by recalculating the 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 postclosure 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, except that the use of partially funded trust funds, as provided in 40 CFR 264.145(a), will not be allowed by the department;
- (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; however, financial or insurance institutions providing such insurance must have a current rating of financial strength of:
- (A) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;
  - (B) Aaa, Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or
  - (C) A++, A+, A, A-, B++, B+ as rated by A.M. Best; or
- (vi) Financial test and corporate guarantee for post-closure care, except that the criterion for minimum tangible net worth in 40 CFR 264.145(f) must be in an amount of at least twenty million dollars.
- (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 postclosure care.
  - (8) Liability requirements.
- (a) An owner or operator of a TSD facility, off-site recycling or used oil processing/rerefining 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, with the following additional requirements:
- (i) Insurance companies providing liability coverage must have a current rating of financial strength of:
- (A) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;
  - (B) Aaa, Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or
  - (C) A++, A+, A, A-, B++, B+ as rated by A.M. Best;
- (ii) The department may file claims against liability insurance when contamination occurs as a result of releases or discharges of dangerous wastes or used oil from recycling units subject to regulation under this section to waters of the state as defined under chapter 90.48 RCW;
- (iii) Facility owners/operators and corporate guarantors requesting the use of the financial test and corporate guarantee must meet a minimum tangible net worth criterion of twenty million dollars.

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- (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), 264.147 (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 facility, as specified in WAC 173-303-610(6), are received by the department.

- (f) The following subsections are incorporated by reference: 40 CFR section 264.147(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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-620, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-620, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-620, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 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

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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 additional 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 International Fire Code's "American Table of Distances for Storage of Explosives" Table 3304.5.2(2) or "Table of Separation Distances for Low Explosives" Table 3304.5.2(3), 2003 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) con-

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tainer storage in a manner equivalent with the International Fire Code. Where no specific standard or requirements are specified in the International 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, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-630, filed 11/30/04, effective 1/1/05; 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 Paint Filter Liquids Test Method 9095B described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" EPA Publication SW-846 as incorporated by reference at 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.

Three publications may be used, where applicable, as guidelines in conducting other than a leak test: Tank Inspection, Repair, Alteration, and Reconstruction, API Standard 653, Addendum 4 issued in December 1999; Guidance for Assessing and Certifying Tank Systems that Store and Treat Dangerous Waste, Ecology Publication No. 94-114; and Steel Tank Institute publication #SP001-00 Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids copyright 2000.

- (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

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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) Publica-

tion 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 determination 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 and existing tank systems or components, prior to their being put into service.
- (ii) For tank systems that store or treat materials that become dangerous wastes, within two years of the dangerous waste listing, or when the tank system has reached fifteen years of age, whichever comes later.
  - (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, groundwater, 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, stress of installation, 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);

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- (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; and
- (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;
- (iv) Pressurized aboveground piping systems with automatic shutoff devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shutoff 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 groundwater, 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 groundwater 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 groundwater 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 groundwater; and
- (D) All other factors that would influence the quality and mobility of the dangerous constituents and the potential for them to migrate to groundwater 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 groundwater, 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 groundwater quality, taking into account:
- (I) The quantity and quality of groundwater and the direction of groundwater flow;
- (II) The proximity and withdrawal rates of groundwater users;
- $\left( III\right)$  The current and future uses of groundwater in the area; and
- (IV) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality.
- (C) The potential adverse effects of a release on surface water quality, taking into account:
- (I) The quantity and quality of groundwater and the direction of groundwater 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

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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 groundwater 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 groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if groundwater 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 groundwater 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:
- (i) 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.
- (ii) For other than nonenterable underground tanks, the owner or operator must either conduct a leak test as in (i)(i) 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.
- (iii) For ancillary equipment, a leak test or other integrity assessment as approved by the department must be conducted at least annually.

Note: Three publications may be used, where applicable, as guidelines for assessing the overall condition of the tank system: Tank Inspection, Repair, Alteration, and Reconstruction, API Standard 653, Addendum 4 issued in December 1999; Guidance for Assessing and Certifying Tank Systems that Store and Treat Dangerous Waste, Ecology Publication No. 94-114; and Steel Tank Institute publication #SP001-00 Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of

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- (iv) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with (i)(i) through (iii) of this subsection.
- (v) 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 (i)(i) through (iii) 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

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- (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 must be reported to the department and other authorities immediately in accordance with WAC 173-303-145. Any release above the "reportable quantity" must also be reported to the National Response Center pursuant to 40 CFR Part 302.
- (ii) Within thirty days (or fifteen days if classified as an emergency) 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.
- (F) In the event of an emergency, additional information as required by WAC 173-303-360.

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- (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
- (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 postclosure 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 postclosure 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).

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- (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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-640, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-640, filed 11/30/04, effective 1/1/05; 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 173-303-64620. 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 173-303-64620, for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The corrective action financial responsibility requirements of WAC 173-303-64620 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 runoff;
- (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 groundwater 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.

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- (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 groundwater 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 groundwater 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) Groundwater 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 groundwater 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 groundwater 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 groundwater protection standard in the facility permit when dangerous constituents have been detected in the groundwater from a regulated unit.
  - (4) Dangerous constituents.
- (a) The department will specify in the facility permit the dangerous constituents to which the groundwater protection

standard of subsection (3) of this section, applies. Dangerous constituents are constituents identified in the Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods for Designating Dangerous Waste* which is incorporated at WAC 173-303-110 (3)(c) and (7), 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 groundwater 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 groundwater.

- (b) The department will exclude a constituent on the Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods for Designating Dangerous Waste* which is incorporated at WAC 173-303-110 (3)(c) and (7), 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 groundwater 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 groundwater and the direction of groundwater flow;
- (D) The proximity and withdrawal rates of groundwater users;
- (E) The current and future uses of groundwater in the area;
- (F) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater 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 groundwater, and the direction of groundwater flow;
  - (D) The patterns of rainfall in the region;
  - (E) The proximity of the regulated unit to surface waters;

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- (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 groundwater 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 groundwater 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 Groundwater Protection

Constituent	Maximum Concentration	1
Arsenic	0.05	
Barium Cadmium Chromium Lead Mercury Selenium Silver Endrin	1.0 0.01 0.05 0.05 0.002 0.01 0.05 0.005	
Lindane Mathagyahlar	0.004	
Methoxychlor Toxaphene 2,4-D	0.005 0.1m	
2,4,5-TP Silvex	0.01	

<sup>1</sup>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 groundwater 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 groundwater 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 groundwater protection standard of subsection (3) of this section, has not been exceeded for a period of three consecutive years.
  - (8) General groundwater monitoring requirements.

The owner or operator must comply with the requirements of this subsection for any groundwater monitoring program developed to satisfy subsections (9), (10), or (11) of this section.

- (a) The groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that:
- (i) Represent the quality of background groundwater that has not been affected by leakage from a regulated unit;
- A determination of background groundwater quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:
- (A) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and
- (B) Sampling at other wells will provide an indication of background groundwater quality that is representative or

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more representative than that provided by the upgradient wells; and

- (ii) Represent the quality of groundwater 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 groundwater monitoring systems are not required for each regulated unit, provided that provisions for sampling the groundwater in the uppermost aquifer will enable detection and measurement at the compliance point of dangerous constituents from the regulated units that have entered the groundwater 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 groundwater 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 chapter 173-160 WAC, "Minimum standards for construction and maintenance of wells."
- (d) The groundwater 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 groundwater monitoring program must include consistent sampling and analytical methods that ensure reliable groundwater sampling, accurately measure dangerous constituents and indicator parameters in groundwater samples, and provide a reliable indication of groundwater quality below the waste management area.
- (f) The groundwater monitoring program must include a determination of the groundwater surface elevation each time groundwater 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 groundwater 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 groundwater 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 groundwater 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 groundwater 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 groundwater monitoring data, the specific type of control chart and its associated parameter values must be proposed

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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 groundwater 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) Groundwater 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 groundwater. 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 groundwater; and
- (iv) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the groundwater background.
- (b) The owner or operator must install a groundwater monitoring system at the compliance point, as specified under subsection (6) of this section. The groundwater monitoring system must comply with subsection (8)(a)(ii), (b), and (c) of this section.
- (c) The owner or operator must conduct a groundwater 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

- groundwater 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.
- (e) The owner or operator must determine the groundwater 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 groundwater 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 groundwater 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 groundwater in all monitoring wells and determine whether constituents in the Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods for Designating Dangerous Waste* which is incorporated at WAC 173-303-110 (3)(c) are present, and if so, in what concentration. However, the department, on a discretionary basis, may allow sampling for a site-specific subset of constituents from the "Ground-Water Monitoring List" Appendix and other representative/related waste constituents.
- (iii) For any "Ground-Water Monitoring List" Appendix compounds found in the analysis pursuant to (g)(ii) of this subsection, the owner or operator may resample within one month or according to an alternative site-specific schedule approved by the director 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 in (g)(ii) of this subsection, the dangerous constituents found during this initial

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"Ground-Water Monitoring List" Appendix 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 of any "Ground-Water Monitoring List" Appendix constituent detected in the groundwater at each monitoring well at the compliance point;
- (B) Any proposed changes to the groundwater 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 groundwater. The owner operator may make a demonstration 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 groundwater to determine whether regulated units are in compliance with the groundwater protection standard under subsection (3) of this section. The department will specify the groundwater 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 groundwater monitoring system at the compliance point as specified under subsection (6) of this section. The groundwater 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 groundwater 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 contamina-

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tion 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 groundwater samples.

- (e) The owner or operator must determine the rate and direction of groundwater 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.
- (g) Annually, the owner or operator must determine whether additional dangerous waste constituents from the Appendix "Ground-Water Monitoring List" in Chemical Testing Methods for Designating Dangerous Waste (which is incorporated at WAC 173-303-110 (3)(c)), which could possibly be present but are not on the detection monitoring list in the permit, are actually present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in (f) of this subsection. To accomplish this, the owner or operator must consult with the department to determine on a case-bycase basis: Which sample collection event during the year will involve enhanced sampling; the number of monitoring wells at the compliance point to undergo enhanced sampling; the number of samples to be collected from each of these monitoring wells; and the specific constituents from the "Ground-Water Monitoring List" Appendix for which these samples must be analyzed. If the enhanced sampling event indicates that "Ground-Water Monitoring List" Appendix constituents are present in the groundwater that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month or at an alternative site-specific schedule approved by the department, and repeat the 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.
- (h) 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 groundwater;
- (B) The hydrogeological characteristics of the facility and of the surrounding land;
- (C) The rate of movement and direction of flow of the affected groundwater;
- (D) The proximity to and withdrawal rates of groundwater users downgradient; and
- (E) The current and future uses of groundwater 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 groundwater protection standard specified in the permit under (a) of this subsection; and
- (B) A plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of this subsection.
- (i) If the owner or operator determines, pursuant to (d) of this subsection, that the groundwater 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 groundwater. 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 groundwater protection standard under subsection (3) of this section. The department will specify the groundwater protection standard in the facility permit, including:

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- (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 groundwater 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 groundwater 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 groundwater 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 groundwater 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 groundwater 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 groundwater 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 groundwater monitoring program under (d) of this subsection, that the groundwater 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 semi-annually.
- (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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-645, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-645, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-645, filed 3/13/03, effective 4/13/03. 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  $89\text{-}02\text{-}059 \text{ (Order } 88\text{-}24), \S \ 173\text{-}303\text{-}645, filed } 1/4/89; 84\text{-}09\text{-}088 \text{ (Order DE Constitution } 1/4/89; 84\text{-}09\text{-}088)$ 83-36), § 173-303-645, filed 4/18/84.]

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**WAC 173-303-646 Corrective action.** WAC 173-303-646 has been broken down into the following sections:

		Old citation
WAC 173-303-	Purpose and	WAC 173-303-
64610	applicability	646(1)
WAC 173-303-	Requirements	WAC 173-303-
64620		646(2)
WAC 173-303-	Use of the Model	WAC 173-303-
64630	Toxics Control	646(3)
	Act	
WAC 173-303-	Grandfathered	WAC 173-303-
64640	corrective action	646 (4) through
	management units	(6)
	(CAMUs)	
WAC 173-303-	Corrective action	WAC 173-303-
64650	management unit	646(4)
	(CAMU)	
WAC 173-303-	Designation of a	WAC 173-303-
64660	corrective action	646(5)
	management unit	
WAC 173-303-	Incorporation of a	WAC 173-303-
64670	regulated unit	646(6)
	within a CAMU	
WAC 173-303-	Temporary units	WAC 173-303-
64680	(TUs)	646(7)
WAC 173-303-	Staging piles	WAC 173-303-
64690		646(8)
WAC 173-303-	Disposal of	
646910	CAMU-eligible	
	wastes into per-	
	mitted hazardous	
771.0	waste landfills	
WAC	Disposal of	
173-303-646920	CAMU-eligible	
	wastes into per-	
	mitted hazardous	
	waste landfills	
	located outside	
	Washington	

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-646, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-646, filed 3/13/03, effective 4/13/03. 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 173-303-64610 Purpose and applicability. (1) The provisions of this section, and WAC 173-303-64620 and 173-303-64630, establish requirements for corrective action for releases of dangerous wastes and dangerous constituents including releases from solid waste management units.

- (2) The provisions of this section apply to facilities seeking or required to have a permit to treat, store, recycle or dispose of dangerous waste.
- (3) The provisions of this section do not apply to cleanup-only facilities.
- (4) For purposes of this section, dangerous constituent means any constituent identified in WAC 173-303-9905 or Appendix "Ground-Water Monitoring List" in *Chemical*

Testing Methods for Designating Dangerous Waste which is incorporated at WAC 173-303-110 (3)(c), 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).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-64610, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64610, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64620 Requirements. (1) 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.

- (2) 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
- (3) 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.
- (4) At a minimum, corrective actions must be consistent with the following requirements of chapter 173-340 WAC.
- (a) 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.
  - (b) WAC 173-340-360, selection of cleanup actions.
- (c) WAC 173-340-400, implementation of the cleanup action.
- (d) WAC 173-340-410, compliance monitoring requirements.
  - (e) WAC 173-340-420, periodic review.
  - (f) WAC 173-340-440, institutional controls.
- (g) WAC 173-340-700 through 173-340-760, cleanup standards.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64620, filed 11/30/04, effective 1/1/05.]

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- WAC 173-303-64630 Use of the Model Toxics Control Act. (1) The department may require the owner/operator of a facility to fulfill his corrective action responsibilities under WAC 173-303-64620 using an enforceable action issued pursuant to the Model Toxics Control Act, as amended, (chapter 70.105D RCW) and its implementing regulations.
- (2) 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 WAC 173-303-64620 and the requirements of chapter 173-303 WAC to the extent required by RCW 70.105D.030 (2)(d) and WAC 173-340-710.
- (3) 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, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64630, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64640 Grandfathered corrective action management units (CAMUs). (1)(a) In accordance with the requirements of this section and WAC 173-303-64610 through 173-303-64630, the department 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. Corrective action management unit means an area within a facility that is used only for managing remediation wastes for implementing corrective action or cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

- (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 WAC 173-303-64630 to fulfill the corrective action requirements of WAC 173-303-64620 or the corrective action requirements of WAC 173-303-645.
  - (2) Designation of a corrective action management unit.
- (a) When designating a CAMU, the director will do so in accordance with 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 groundwater and 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 groundwater from sources located within the CAMU; and
- (B) Detect and subsequently characterize releases of dangerous waste and dangerous constituents to groundwater 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 control, minimize, or eliminate to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, to groundwaters, to surface waters, or to the atmosphere 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

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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 environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, and dangerous waste decomposition products to the ground, to groundwaters, 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 WAC 173-303-64650, 173-303-64660, and 173-303-64670.
- (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 an 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).
  - (3) 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(4) or 40 CFR Part 265.113, which is incorporated by reference at WAC 173-303-400 (3)(a); 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.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64640, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64650 Corrective action management unit (CAMU). (1) Except as provided in subsection (2) of this section, CAMUs are subject to the requirements of this section and WAC 173-303-64660 and 173-303-64670.

(2) CAMUs that were approved before April 22, 2002, or for which substantially complete applications (or equivalents) were submitted to the department on or before November 20, 2000, are subject to the requirements in WAC 173-303-64640 for grandfathered CAMUs; CAMU waste, activities, and design will not be subject to the standards in WAC 173-303-64650 and 173-303-64660, so long as the waste,

activities, and design remain within the general scope of the CAMU as approved.

- (3) In accordance with the requirements of this section, the applicable portions of WAC 173-303-64610 through 173-303-64630, and with WAC 173-303-64660, the department may designate an area at a facility as a corrective action management unit for the purpose of treating, storing or disposing of CAMU-eligible waste that originates at the same facility in order to implement remedies under this section or to implement other cleanup actions. Corrective action management unit means an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.
  - (a) CAMU-eligible waste means:
- (i) All solid and dangerous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, that are managed for implementing cleanup. As-generated wastes (either dangerous or nondangerous) from ongoing industrial operations at a site are not CAMU-eligible wastes.
- (ii) Wastes that would otherwise meet the description in (a)(i) of this subsection are not "CAMU-Eligible Wastes" where:
- (A) The wastes are dangerous wastes found during cleanup in intact or substantially intact containers, tanks, or other nonland-based units found above ground, unless the wastes are first placed in the tanks, containers or nonland-based units as part of cleanup, or the containers or tanks are excavated during the course of cleanup; or
- (B) The department exercises the discretion in (b) of this subsection to prohibit the wastes from management in a CAMU.
- (iii) Notwithstanding (a)(i) of this subsection, where appropriate, as-generated nondangerous waste may be placed in a CAMU where such waste is being used to facilitate treatment or the performance of the CAMU.
- (b) The department may prohibit, where appropriate, the placement of waste in a CAMU where the department has or receives information that such wastes have not been managed in compliance with applicable land disposal treatment standards of WAC 173-303-140(2), or applicable unit design requirements of WAC 173-303-600 through 173-303-695, or applicable unit design requirements of WAC 173-303-400, or that noncompliance with other applicable requirements of this chapter likely contributed to the release of the waste.
  - (c) Prohibition against placing liquids in CAMUs.
- (i) The placement of bulk or noncontainerized liquid dangerous waste or free liquids contained in dangerous waste (whether or not sorbents have been added) in any CAMU is prohibited except where placement of such wastes facilitates the remedy selected for the waste.
- (ii) The requirements in WAC 173-303-140 (4)(b)(ii) for placement of containers holding free liquids in landfills apply to placement in a CAMU except where placement facilitates the remedy selected for the waste.
- (iii) The placement of any liquid which is not a dangerous waste in a CAMU is prohibited unless such placement

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facilitates the remedy selected for the waste or a demonstration is made pursuant to WAC 173-303-140 (4)(b)(v).

- (iv) The absence or presence of free liquids in either a containerized or a bulk waste must be determined in accordance with WAC 173-303-140 (4)(b)(iii). Sorbents used to treat free liquids in CAMUs must meet the requirements of WAC 173-303-140 (4)(b)(iv).
- (d) Placement of CAMU-eligible waste into or within a CAMU does not constitute land disposal of dangerous waste.
- (e) Consolidation or placement of CAMU-eligible waste into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.
- (4) 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.
- (5) 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 WAC 173-303-64630 to fulfill the corrective action requirements of WAC 173-303-64620 or the corrective action requirements of WAC 173-303-645.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64650, filed 11/30/04, effective 1/1/05.]

- WAC 173-303-64660 Designation of a corrective action management unit. (1) The department must designate a CAMU that will be used for storage and/or treatment only in accordance with subsection (4) of this section. When designating all other CAMUs, the department will do so in accordance with WAC 173-303-64650 and 173-303-64670, and the following:
- (a) The CAMU will facilitate the implementation of reliable, effective, protective, and cost-effective remedies;
- (b) 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;
- (c) The CAMU will include uncontaminated areas of the facility only if including such areas for the purposes of managing CAMU-eligible wastes is more protective than management of such wastes at contaminated areas of the facility;
- (d) 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;
- (e) When appropriate and practicable, the CAMU will expedite the timing of remedial activity implementation;
- (f) 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
- (g) 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.
- (2) The owner/operator must provide sufficient information to enable the department to designate a CAMU in accor-

- dance with the criteria in this section. This must include, unless not reasonably available, information on:
- (a) The origin of the waste and how it was subsequently managed (including a description of the timing and circumstances surrounding the disposal and/or release);
- (b) Whether the waste was listed or identified as dangerous at the time of disposal and/or release; and
- (c) Whether the disposal and/or release of the waste occurred before or after the land disposal requirements of 40 CFR part 268, which are incorporated by reference at WAC 173-303-140 (2)(a), or, if the waste is a state-only dangerous waste, the land disposal restrictions of WAC 173-303-140 (2)(b), were in effect for the waste listing, characteristic, or criterion.
- (3) When designating a CAMU, the department will specify, in the permit or order, requirements for the CAMU including the following:
  - (a) The areal configuration of the CAMU;
- (b) Except as provided in subsection (5) of this section, requirements for CAMU-eligible waste management within the CAMU including specification of applicable design, operation, treatment, and closure requirements;
- (c) Minimum design requirements. CAMUs, except as provided in subsection (4) of this section, into which wastes are placed must be designed in accordance with the following:
- (i) Unless the department approves alternate requirements under (c)(ii) of this subsection, CAMUs that consist of new, replacement, or laterally expanded units must include a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner. For purposes of this subsection, composite liner means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML) (geomembrane), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1x10-7 cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component;
- (ii) Alternate requirements. The department may approve alternate requirements if:
- (A) The department finds that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents into the groundwater or surface water at least as effectively as the liner and leachate collection systems in (c)(i) of this subsection; or
- (B) The CAMU is to be established in an area with existing significant levels of contamination, and the department finds that an alternative design, including a design that does not include a liner, would prevent migration from the unit that would exceed long-term remedial goals.
- (d) Minimum treatment requirements: Unless the wastes will be placed in a CAMU for storage and/or treatment only in accordance with subsection (4) of this section, CAMU-eligible wastes that, absent this subsection, would be subject to the treatment requirements of WAC 173-303-140(2), and that the department determines contain principal hazardous con-

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stituents must be treated to the standards specified in (d)(iii) of this subsection.

- (i) Principal hazardous constituents are those constituents that the department determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.
- (A) In general, the department will designate as principal hazardous constituents:
- (I) Carcinogens that pose a potential direct risk from ingestion or inhalation at the site at or above 10-3; and
- (II) Noncarcinogens that pose a potential direct risk from ingestion or inhalation at the site an order of magnitude or greater over their reference dose.
- (B) The department will also designate constituents as principal hazardous constituents, where appropriate, when risks to human health and the environment posed by the potential migration of constituents in wastes to groundwater are substantially higher than cleanup levels or goals at the site; when making such a designation, the department may consider such factors as constituent concentrations, and fate and transport characteristics under site conditions.
- (C) The department may also designate other constituents as principal hazardous constituents that the department determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.
- (ii) In determining which constituents are "principal hazardous constituents," the department must consider all constituents which, absent this section, would be subject to the treatment requirements of WAC 173-303-140(2).
- (iii) Waste that the department determines contains principal hazardous constituents must meet treatment standards determined in accordance with (d)(iv) or (v) of this subsection
  - (iv) Treatment standards for wastes placed in CAMUs.
- (A) For nonmetals, treatment must achieve 90 percent reduction in total principal hazardous constituent concentrations, except as provided by (d)(iv)(C) of this subsection.
- (B) For metals, treatment must achieve 90 percent reduction in principal hazardous constituent concentrations as measured in leachate from the treated waste or media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by (d)(iv)(C) of this subsection.
- (C) When treatment of any principal hazardous constituent to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the Universal Treatment Standard is not required. Universal Treatment Standards are identified in 40 CFR 268.48 Table UTS, which is incorporated by reference at WAC 173-303-140 (2)(a).
- (D) For waste exhibiting the dangerous characteristic of ignitability, corrosivity or reactivity, the waste must also be treated to eliminate these characteristics.
- (E) For debris, the debris must be treated in accordance with 40 CFR 268.45, which is incorporated by reference at WAC 173-303-140 (2)(a), or by methods or to levels established under (d)(iv)(A) through (D) of this subsection or

- (d)(v) of this subsection, whichever the department determines is appropriate.
- (F) Alternatives to TCLP. For metal bearing wastes for which metals removal treatment is not used, the department may specify a leaching test other than the TCLP (SW-846 Method 1311, WAC 173-303-110 (3)(a)) to measure treatment effectiveness, provided the department determines that an alternative leach testing protocol is appropriate for use, and that the alternative more accurately reflects conditions at the site that affect leaching.
- (v) Adjusted standards. The department may adjust the treatment level or method in (d)(iv) of this subsection to a higher or lower level, based on one or more of the following factors, as appropriate. The adjusted level or method must be protective of human health and the environment:
- (A) The technical impracticability of treatment to the levels or by the methods in (d)(iv) of this subsection;
- (B) The levels or methods in (d)(iv) of this subsection would result in concentrations of principal hazardous constituents (PHCs) that are significantly above or below cleanup standards applicable to the site (established either site-specifically, or promulgated under state or federal law);
- (C) The views of the affected local community on the treatment levels or methods in (d)(iv) of this subsection as applied at the site, and, for treatment levels, the treatment methods necessary to achieve these levels;
- (D) The short-term risks presented by the on-site treatment method necessary to achieve the levels or treatment methods in (d)(iv) of this subsection;
- (E) The long-term protection offered by the engineering design of the CAMU and related engineering controls:
- (I) Where the treatment standards in (d)(iv) of this subsection are substantially met and the principal hazardous constituents in the waste or residuals are of very low mobility; or
- (II) Where cost-effective treatment has been used and the CAMU meets the liner and leachate collection requirements for new land disposal units at WAC 173-303-665 (2)(h) and (j); or
- (III) Where, after review of appropriate treatment technologies, the department determines that cost-effective treatment is not reasonably available, and the CAMU meets the liner and leachate collection requirements for new land disposal units at WAC 173-303-665 (2)(h) and (j); or
- (IV) Where cost-effective treatment has been used and the principal hazardous constituents in the treated wastes are of very low mobility; or
- (V) Where, after review of appropriate treatment technologies, the department determines that cost-effective treatment is not reasonably available, the principal hazardous constituents in the wastes are of very low mobility, and either the CAMU meets or exceeds the liner standards for new, replacement, or laterally expanded CAMUs in (c)(i) and (ii) of this subsection, or the CAMU provides substantially equivalent or greater protection.
- (vi) The treatment required by the treatment standards must be completed prior to, or within a reasonable time after, placement in the CAMU.
- (vii) For the purpose of determining whether wastes placed in CAMUs have met site-specific treatment standards, the department may, as appropriate, specify a subset of the principal hazardous constituents in the waste as analytical

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surrogates for determining whether treatment standards have been met for other principal dangerous constituents. This specification will be based on the degree of difficulty of treatment and analysis of constituents with similar treatment properties.

- (e) Except as provided in subsection (4) of this section, requirements for groundwater and vadose zone monitoring and corrective action that are sufficient to:
- (i) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of dangerous waste and dangerous constituents in groundwater from sources located within the CAMU; and
- (ii) Detect and subsequently characterize releases of dangerous waste and dangerous constituents to groundwater that may occur from areas of the CAMU in which wastes will remain in place after CAMU closure.
- (iii) Require notification to the department and corrective action as necessary to protect human health and the environment for releases to groundwater from the CAMU.
- (f) Except as provided in subsection (4) of this section, requirements for closure will minimize the need for further maintenance; and control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of dangerous wastes, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, to groundwaters, to surface waters, or to the atmosphere.
- (i) Requirements for closure will include, as appropriate and deemed necessary by the department, the following:
- (A) Requirements for excavation, removal, treatment, and/or containment of wastes; and
- (B) Requirements for removal and decontamination of equipment, devices, and structures used in CAMU-eligible waste management activities within the CAMU.
- (ii) In establishing closure requirements for CAMUs under subsection (3) of this section, the department will consider the following factors:
  - (A) CAMU characteristics;
- (B) Volume of wastes which will remain in place after CAMU closure;
  - (C) Potential for releases from the CAMU;
  - (D) Physical and chemical characteristics of the waste;
- (E) Hydrogeological 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
- (F) Potential for exposure of humans and environmental receptors if releases were to occur at or from the CAMU.
  - (iii) Cap requirements:
- (A) At final closure of the CAMU, for areas in which wastes will remain after closure of the CAMU, with constituent concentrations at or above remedial levels or goals applicable to the site, the owner or operator must cover the CAMU with a final cover designed and constructed to meet the following performance criteria, except as provided in (f)(iii)(B) of this subsection:
- (I) Provide long-term minimization of migration of liquids through the closed unit;
  - (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) The department may determine that modifications to (f)(iii)(A) of this subsection are needed to facilitate treatment or the performance of the CAMU (e.g., to promote biodegradation).
- (iv) The department 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 environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, and dangerous waste decomposition products to the ground, to groundwaters, 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.
- (4) CAMUs used for storage and/or treatment only are CAMUs in which wastes will not remain after closure. Such CAMUs must be designated in accordance with all of the requirements of this subsection, except as follows.
- (a) CAMUs that are used for storage and/or treatment only and that operate in accordance with the time limits established in the staging pile regulations at 40 CFR 264.554 (d)(1)(iii), (h), and (i) are subject to the requirements for staging piles at 40 CFR 264.554 (d)(1)(i) and (ii), § 264.554 (d)(2), § 264.554 (e) and (f), and § 264.554 (j) and (k) in lieu of the performance standards and requirements for CAMUs in this section at subsections (1) and (3)(c) through (f). The staging pile requirements of 40 CFR Part 264.554 are incorporated by reference at WAC 173-303-64690.
- (b) CAMUs that are used for storage and/or treatment only and that do not operate in accordance with the time limits established in the staging pile regulations at 40 CFR 264.554 (d)(1)(iii), (h), and (i), which are incorporated by reference:
- (i) Must operate in accordance with a time limit, established by the department, that is no longer than necessary to achieve a timely remedy selected for the waste; and
- (ii) Are subject to the requirements for staging piles at 40 CFR 264.554 (d)(1)(i) and (ii), 264.554 (d)(2), 264.554 (e) and (f), and 264.554 (j) and (k) in lieu of the performance standards and requirements for CAMUs in this section at subsections (1) and (3)(d) and (f).
- (5) CAMUs into which wastes are placed where all wastes have constituent levels at or below remedial levels or goals applicable to the site do not have to comply with the requirements for liners at subsection (3)(c)(i) of this section, caps at subsection (3)(f)(iii) of this section, groundwater monitoring requirements at subsection (3)(e) of this section or, for treatment and/or storage-only CAMUs, the design standards at subsection (4) of this section.
- (6) The department must provide public notice and a reasonable opportunity for public comment before designating a CAMU. Such a notice will include the rationale for any pro-

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posed adjustments under subsection (3)(d)(v) of this section to the treatment standards in subsection (3)(d)(iv) of this section

- (7) Notwithstanding any other provision of this subsection, the department may impose additional requirements as necessary to protect human health and the environment.
- (8) Incorporation of the designation of and requirements for a CAMU into a existing permit must be approved by the department 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).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-64660, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64660, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64670 Incorporation of a regulated unit within a CAMU. (1) The department 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:

- (a) The regulated unit is closed or closing, meaning it has begun the closure process under WAC 173-303-610(4) or 40 CFR Part 265.113, which is incorporated by reference at WAC 173-303-400 (3)(a); and
- (b) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions at the facility.
- (2) 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.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64670, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64680 Temporary units (TUs). (1) In accordance with the requirements of this subsection, the department 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 department 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.

- (2) Any temporary unit to which alternative requirements are applied in accordance with subsection (1) of this section will be:
  - (a) Located within the facility boundary; and
- (b) Used only for treatment or storage of remediation wastes managed pursuant to implementation of the corrective action requirements of WAC 173-303-64620 at the facility.
- (3) In establishing standards to be applied to a temporary unit, the department will consider the following factors:
  - (a) Length of time unit will be in operation;
  - (b) Type of unit;
  - (c) Volumes of wastes to be managed;

- (d) Physical and chemical characteristics of the wastes to be managed in the unit;
  - (e) Potential for releases from the unit;
- (f) Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases; and
- (g) Potential for exposure of humans and environmental receptors if releases were to occur from the unit.
- (4) The department 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.
- (5) The department may extend the operating period of a temporary unit for up to one additional year, provided the director determines that:
- (a) Continued operation of the unit will not pose a threat to human health and the environment; and
- (b) Continued operation of the unit is necessary to ensure timely and efficient implementation of remedial actions at the facility.
- (6) 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:
- (a) Approved in accordance with the procedures for agency-initiated permit modifications under WAC 173-303-830(3); or
- (b) Requested by the owner or operator as a Class II modification according to the procedures under WAC 173-303-830(4).
- (7) The department 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.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64680, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64690 Staging piles. The requirements for staging piles in 40 CFR Part 264.554 are incorporated by reference. The word "director" in 40 CFR means "department."

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64690, filed 11/30/04, effective 1/1/05.]

WAC 173-303-646910 Disposal of CAMU-eligible wastes into permitted dangerous waste landfills. (1) The department may approve placement of CAMU-eligible wastes in dangerous waste landfills not located at the site from which the waste originated, without the wastes meeting the requirements of WAC 173-303-140(2), if the conditions in (a) through (c) of this subsection are met:

- (a) The waste meets the definition of CAMU-eligible waste in WAC 173-303-64650 (3)(a) and (b).
- (b) The department identifies principal hazardous constituents in such waste, in accordance with WAC 173-303-64660 (3)(d)(i) and (ii), and requires that such principal hazardous constituents are treated to any of the following standards specified for CAMU-eligible wastes:
- (i) The treatment standards under WAC 173-303-64660 (3)(d)(iv); or

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- (ii) Treatment standards adjusted in accordance with WAC 173-303-64660 (3)(d)(v)(A), (C), (D) or (E)(I); or
- (iii) Treatment standards adjusted in accordance with WAC 173-303-64660 (3)(d)(v)(E)(II), where treatment has been used and that treatment significantly reduces the toxicity or mobility of the principal hazardous constituents in the waste, minimizing the short-term and long-term threat posed by the waste, including the threat at the remediation site.
- (c) The landfill receiving the CAMU-eligible waste must have a dangerous waste permit, meet the requirements for new landfills in WAC 173-303-665, and be authorized to accept CAMU-eligible wastes; for the purposes of this requirement, "permit" does not include interim status.
- (2) The person seeking approval must provide sufficient information to enable the department to approve placement of CAMU-eligible waste in accordance with subsection (1) of this section. Information required by WAC 173-303-64660 (2)(a) through (c) for CAMU applications must be provided, unless not reasonably available.
- (3) The department must provide public notice and a reasonable opportunity for public comment before approving CAMU-eligible waste for placement in an offsite permitted dangerous waste landfill, consistent with the requirements for CAMU approval at WAC 173-303-64660(6). The approval must be specific to a single remediation.
- (4) Applicable dangerous waste management requirements, including recordkeeping requirements to demonstrate compliance with treatment standards approved under this section, for CAMU-eligible waste must be incorporated into the receiving facility permit through permit issuance or a permit modification, providing notice and an opportunity for comment and a hearing. Notwithstanding WAC 173-303-810(8), a landfill may not receive CAMU-eligible waste under this subsection unless its permit specifically authorizes receipt of such waste.
- (5) For each remediation, CAMU-eligible waste may not be placed in an offsite landfill authorized to receive CAMU-eligible waste in accordance with subsection (4) of this section until the following additional conditions have been met:
- (a) The landfill owner/operator notifies the department responsible for oversight of the landfill and persons on the facility mailing list, maintained in accordance with WAC 173-303-840 (3)(e)(i)(D), of his or her intent to receive CAMU-eligible waste in accordance with this section; the notice must identify the source of the remediation waste, the principal hazardous constituents in the waste, and treatment requirements.
- (b) Persons on the facility mailing list may provide comments, including objections to the receipt of the CAMU-eligible waste, to the department within fifteen days of notification
- (c) The department may object to the placement of the CAMU-eligible waste in the landfill within thirty days of notification; the department may extend the review period an additional thirty days because of public concerns or insufficient information.
- (d) CAMU-eligible wastes may not be placed in the landfill until the department has notified the facility owner/operator that he or she does not object to its placement.

- (e) If the department objects to the placement or does not notify the facility owner/operator that he or she has chosen not to object, the facility may not receive the waste, notwithstanding WAC 173-303-810(8), until the objection has been resolved, or the owner/operator obtains a permit modification in accordance with the procedures of WAC 173-303-830(4) specifically authorizing receipt of the waste.
- (f) As part of the permit issuance or permit modification process of subsection (4) of this section, the department may modify, reduce, or eliminate the notification requirements of this subsection as they apply to specific categories of CAMU-eligible waste, based on minimal risk.
- (6) Generators of CAMU-eligible wastes sent off site to a dangerous waste landfill under this subsection must comply with the requirements of 40 CFR 268.7 (a)(4), which is incorporated by reference at WAC 173-303-140(2); offsite facilities treating CAMU-eligible wastes to comply with this section must comply with the requirements of Sec. 268.7 (b)(4), which is incorporated by reference at WAC 173-303-140(2), except that the certification must be with respect to the treatment requirements of subsection (1)(b) of this section.
- (7) For the purposes of this subsection only, the "design of the CAMU" in WAC 173-303-64660 (3)(d)(v)(E) means design of the permitted dangerous waste landfill.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10),  $\S$  173-303-646910, filed 11/30/04, effective 1/1/05.]

WAC 173-303-646920 Disposal of CAMU-eligible wastes into permitted hazardous waste landfills located outside Washington. Notwithstanding any provision of WAC 173-303-646910, the department may approve placement of CAMU-eligible wastes in hazardous waste landfills located outside of the state of Washington if the landfill receiving the CAMU-eligible waste is authorized to accept CAMU-eligible wastes pursuant to 40 CFR § 264.555 or pursuant to EPA-approved state regulations implementing 40 CFR § 264.555, and the conditions of WAC 173-303-646910 (1)(a), (b), (2), (3), and (6) are met.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-646920, filed 11/30/04, effective 1/1/05.]

**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 groundwater 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 groundwater 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-

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- 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 groundwater 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 groundwater 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 groundwater 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 groundwater 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<sup>-7</sup>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<sup>-1</sup>cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of syn-

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thetic or geonet drainage materials with a transmissivity of 3 x 10<sup>-4</sup>m<sup>2</sup>sec 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 groundwater
- (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 groundwater 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, groundwater, 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 groundwater 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 WAC 173-303-040); and
- (C) The monofill is in compliance with generally applicable groundwater 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 groundwater 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

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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:
- $\left(v\right)$  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 groundwater monitoring system and comply with all applicable requirements of WAC 173-303-645; and

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- (iv) Prevent run-on and runoff 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 groundwater, 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

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- (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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-650, filed 6/30/09, effective 7/31/09. 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

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- (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 groundwater 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 runoff 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 runoff 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 runoff 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 runoff 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:

	Annual Cd application rate
Time period	(kilograms per hectare)
Present to June 30, 1984	2.0
July 1, 1984 to Dec. 31, 1986	
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

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- (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 soilpore 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 makeup 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 makeup 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 makeup 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.

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- (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 runoff 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 runoff 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 runoff 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;

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- (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 makeup 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, and 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 groundwater, surface water, or air so as to protect human health and the environment.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-655, filed 6/30/09, effective 7/31/09; 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 runoff 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.

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- (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 groundwater 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 groundwater 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 groundwater 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 groundwater 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 groundwater 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 runoff 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 runoff 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, each lateral expansion of a waste pile unit, and each replacement of an existing waste pile unit must install two or more liners and a leachate collection and removal system above and between such liners.
  - (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<sup>-7</sup> 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 sys-

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tem 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  $10^{-2}$  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 x  $10^{-5}$  m<sup>2</sup>/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 groundwater.
- (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 groundwater 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 sec-

- tion. 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;

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- (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 runoff 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

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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 groundwater, to surface water, or air so as to protect human health and the environment.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-660, filed 6/30/09, effective 7/31/09; 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 groundwater 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 groundwater or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

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- (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 groundwater 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 groundwater 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 runoff 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 runoff 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 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 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 x  $10^{-2}$  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 x  $10^{-5}$  m<sup>2</sup>/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 groundwater.
- (i) 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 groundwater 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.
- (j) 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

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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 WAC 173-303-040); and
- (C) The monofill is in compliance with generally applicable groundwater 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 groundwater or surface water at any future time.
- (k) 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 runoff 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 groundwater monitoring system and comply with all other applicable requirements of WAC 173-303-645;
- (v) Prevent run-on and runoff 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.

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- (8) Action leakage rate.
- (a) The department must approve an action leakage rate for landfill 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 I 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 a landfill 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

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migration of these wastes to groundwater, 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.
- (13) Disposal of liquid waste. Special requirements for bulk and containerized liquids are at WAC 173-303-140 (4)(b).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-665, filed 6/30/09, effective 7/31/09; 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) *Integration of the MACT standards*. 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). Note that if you are subject to Part 63 you must get an air permit from ecology or the local air authority.
- (i) Except as provided by (b)(ii) through (iv) of this subsection, the standards of this section do not apply to a new dangerous waste incineration unit that becomes subject to dangerous waste permit requirements after October 12, 2005; or no longer apply when an owner or operator of an existing dangerous waste incineration unit demonstrates compliance with the maximum achievable control technology (MACT) requirements of 40 CFR part 63, subpart EEE, by conducting a comprehensive performance test and submitting to the department a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with the requirements of part 63, subpart EEE. Nevertheless, even after this demonstration of compliance with the MACT standards, dangerous waste permit conditions that were based on the standards of this section will continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.
- (ii) The MACT standards do not replace the closure requirements of WAC 173-303-610 or the applicable requirements of WAC 173-303-280 through 173-303-395, 173-303-645, 173-303-610, 173-303-620, 173-303-691, 173-303-692, and 173-303-902.
- (iii) The particulate matter standard of subsection (4)(c)(ii) of this section remains in effect for incinerators that elect to comply with the alternative to the particulate matter standard of 40 CFR 63.1206 (b)(14) and 63.1219(e).
- (iv) The following requirements remain in effect for startup, shutdown, and malfunction events if you elect to comply with 40 CFR 270.235 (a)(1)(i), which is incorporated

by reference, to minimize emissions of toxic compounds from these events:

- (A) Subsection (6)(a) of this section requiring that an incinerator operate in accordance with operating requirements specified in the permit; and
- (B) Subsection (6)(c) of this section requiring compliance with the emission standards and operating requirements during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes.
- (v) The particulate matter standard of subsection (4) of this section remains in effect for incinerators that elect to comply with the alternative to the particulate matter standard of 40 CFR 63.1206 (b)(14) and 63.1219(e).
- (c) 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.
- (d) 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 by-products. Principal organic dangerous constituents (PODCs) and dangerous combustion by-products 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 by-products 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 constit-

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uents of the waste feed and its combustion by-products 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 by-products which represent the greatest degree of difficulty of incineration will be those most likely to be designated as PODCs and dangerous combustion by-products. Constituents are more likely to be designated as PODCs or dangerous combustion by-products 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 by-products 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:

$$DRE = \frac{(\text{win - wout}) \times 100\%}{\text{win}}$$

Where:

win = Mass feed rate of one PODC in the waste stream feeding the incinerator, and

wout = 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 by-products designated under subsection (3) of this section so that the total mass emission rate of these by-products 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:

$$Pc = \frac{Pm \times 14}{21-Y}$$

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 judg-

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ment. 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. 09-14-105 (Order 07-12), § 173-303-670, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-670, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-670, filed 10/19/95, effective 11/19/55, 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

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water runoff 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 runoff 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 depart-

ment, 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<sup>-7</sup> centimeters per second, for example, 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)(b) of this section instead of subsection (3)(a) 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, stress of installation, the stress of daily operations, for example, 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.

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- (b) If an owner/operator elects to comply with subsection (3)(a) of this section instead of subsection (3)(b) 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 groundwater 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 groundwater 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 runoff.
- (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 runoff 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 runoff 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 runoff 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;

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- (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 cleanup are complete and notify the owner or operator of the determination and the underlying rationale in writing.
- (iii) Upon completing all repairs and cleanup, 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 cleanup 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 runoff 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. 09-14-105 (Order 07-12), § 173-303-675, filed 6/30/09, effective 7/31/09; 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 must 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, part 63 subpart EEE (which is incorporated by reference at WAC 173-400-075 (5)(a)), 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

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of wastes constituents in the groundwater 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 groundwater, including other sources of contamination and their cumulative impact on the groundwater;
  - (iv) The quantity and direction of groundwater flow;
- (v) The proximity to and withdrawal rates of current and potential groundwater 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 groundwater 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 173-303-64620 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 groundwater 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, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10),  $\S$  173-303-680, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01),  $\S$  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),  $\S$  173-303-680, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33),  $\S$  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  $\S$  3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42),  $\S$  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) (that is, a "ninety-day" tank or container) and is not a recycling unit under the provisions of WAC 173-303-120.

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(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 receive a final permit incorporating the requirements of this section, the owner and operator are subject to the requirements of 40 CFR 265 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-690, filed 6/30/09, effective 7/31/09; 03-07-049 (Order 02-03), § 173-303-690, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 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 264.1064(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) For the owner or operator of a facility subject to the requirements of 40 CFR 264.1052 through 264.1065 and who received a final permit under section 3005 of RCRA prior to December 6, 1996, the requirements of 40 CFR 264.1052 through 264.1065 must be incorporated into the permit when the permit is reissued under WAC 173-303-840(8) or reviewed under WAC 173-303-806(11). Until such date when the owner or operator receives a final permit incorporating the requirements of 40 CFR 264.1052 through 264.1065, the owner or operator is subject to the requirements of 40 CFR 265, Subpart BB, which is incorporated by reference at WAC 173-303-400 (3)(a).
- (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).
- (g) Purged coatings and solvents from surface coating operations subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the surface coating of automobiles and light-duty trucks at 40 CFR part 63, subpart IIII, are not subject to the requirements of this section.

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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-691, filed 6/30/09, effective 7/31/09; 03-07-049 (Order 02-03), § 173-303-691, filed 3/13/03, effective 4/13/03. 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

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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 onsite 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 are 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 264.1080, refer to WAC 173-303-692. 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-692, filed 6/30/09, effective 7/31/09; 03-07-049 (Order 02-03), § 173-303-692, filed 3/13/03, effective 4/13/03. 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 runoff, to the soil, groundwater, surface water, and atmosphere;

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- (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 environmental 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 land-fills (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." The sentence at 40 CFR 264.1101 (c)(2) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-695, filed 6/30/09, effective 7/31/09; 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;

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- (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, groundwater pro-

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tection 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 groundwater 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 munitions 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) Mercury-containing equipment 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.)

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- (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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-800, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-800, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-800, filed 5/10/00, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-800, filed 11/2/98, 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 173-303-64620, 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;

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- (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 173-303-64620, 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 unit that treats state-only dangerous wastes generated on or off site, or federally regulated hazardous waste generated on-site, or a wastewater treatment unit that treats dangerous wastes generated on or offsite, will have a permit by rule, subject to limitations in (b) and (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) Include the wastestream as a source of wastewater in the application and provide an estimate of flow, the chemical characteristics of the wastestream, whether it is a batch vs. continuous discharge, and the treatment that it will receive;
  - (iii) Comply with the conditions of that permit;
  - (iv) 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, and WAC 173-303-380 (1)(a) when the owner or operator of a wastewater treatment unit is treating federally regulated wastewaters generated offsite;
  - (J) WAC 173-303-390, facility reporting.
- (b) The owner or operator of a wastewater treatment unit may treat dangerous wastewater received from off site provided the wastewater is generated within the same industry and the wastewaters will be effectively treated by the wastewater treatment unit, if:

The owner or operator complies with (a)(i) through (iv) of this subsection.

(c) The department may require the owner or operator of a totally enclosed treatment facility or an elementary neutral-

- ization 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, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-802, filed 11/30/04, effective 11/105. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-802, filed 11/19/95, 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 11/8/94. 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

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- 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 NAICS 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

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- (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, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-803, filed 11/30/04, effective 1/1/05; 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, effec-

tive 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 waste 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 previ-

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ously 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 173-303-64620 or 173-303-64630, 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,

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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.
- (viii) Changes necessary to comply with standards under 40 CFR part 63, subpart EEE—National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors, which are incorporated by reference at WAC 173-400-075 (5)(a).
- (8) Termination of interim status permit. The following are causes for terminating an interim status permit, or for denying a revised permit application:
- (a) Final administrative disposition of a final facility permit application is made pursuant to WAC 173-303-806;
- (b) When the department on examination or reexamination of a Part A application determines that it fails to meet the applicable standards of this chapter, it may notify the owner or operator that the application is deficient and that the interim status permit has been revoked. The owner or operator will then be subject to enforcement for operating without a permit.
- (c) Failure to submit a requested Part B application on time, or to provide in full the information required in the Part B application;
  - (d) Violation of applicable interim status standards;
- (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 groundwater 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 groundwater 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 groundwater 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, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-805, filed 11/30/04, effective 1/1/05; 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

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- (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(3).
- (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-
- (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 runoff 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 outges;
- (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

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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), 173-303-656(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 flood plain 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, runoff 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 groundwater 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 groundwater 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 groundwater flow direction and rate, and the basis for such identification (that is, 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 groundwater 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 groundwater 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 "Ground-Water Monitoring List" in *Chemical Testing Methods for Designating Dangerous Waste* which is incorporated at WAC 173-303-110 (3)(c) and (7), 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 groundwater 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 groundwater at the time of permit appli-

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- cation, 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 groundwater;
  - (II) A proposed groundwater 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 groundwater monitoring data;
- (G) If the presence of dangerous constituents has been detected in the groundwater 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 groundwater, 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 groundwater 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 groundwater monitoring data; and
- (H) If dangerous constituents or parameters have been measured in the groundwater which exceed the concentration limits established under WAC 173-303-645(5), Table 1, or if groundwater 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 groundwater 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 pro-

- gram 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 groundwater, including concentrations of dangerous constituents and parameters;
- (II) The concentration limit for each dangerous constituent and parameter found in the groundwater 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 groundwater 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 groundwater 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 groundwater protection program. The owner or operator must develop a contingent groundwater 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 groundwater protection program must at a minimum:
- (I) Define the local and regional hydrogeologic characteristics. The contingent groundwater 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; groundwater 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 groundwater protection program.
- (II) Identify the range of potential release scenarios that could occur during facility operation and the post-closure

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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 groundwater travel times. The description of the systems must also provide how the remediation system will achieve cleanup, its efficiency, and the time frames 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 groundwater 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 groundwater 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.

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- (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 groundwater, 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 173-303-64610(4)) 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 173-303-64610(4)) 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 groundwater or surface water during the life of the facility; or

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- (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;
- (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 groundwater 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 pro-

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- vided 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 groundwater 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 runoff;
- (D) Management of collection and holding units associated with run-on and runoff 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 runoff, 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) and subsection (4)(f)(v) of this section provide 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 as approved by the department;
- (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);

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- (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.
- (v) When an owner or operator of a dangerous waste incineration unit becomes subject to dangerous waste permit requirements after October 12, 2005, or when an owner or operator of an existing dangerous waste incinerator unit demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (that is, by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with all applicable requirements of 40 CFR part 63, subpart EEE), the requirements of this subsection do not apply, except those provisions the department determines are necessary to ensure compliance with WAC 173-303-670 (6)(a) and (c) if you elect to comply with 40 CFR 270.235 (a)(1)(i), which is incorporated by reference at WAC 173-303-841, to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the department may apply the provisions of this subsection, on a case-by-case basis, for purposes of information collection in accordance with WAC 173-303-800(11) and 173-303-815 (2)(b)(ii). Note that 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). If you are subject to 40 CFR Part 63 you must get an air permit from ecology or the local air authority.
- (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,

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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 runoff;
- (C) Minimization of runoff of dangerous constituents from the treatment zone;
- (D) Management of collection and holding facilities associated with run-on and runoff 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). This submission must address the following items as specified in WAC 173-303-655(12):
- (A) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
- (B) The attenuative properties of underlying and surrounding soils or other materials;
- (C) The mobilizing properties of other materials codisposed with these wastes; and
- (D) The effectiveness of additional treatment, design, or monitoring techniques.
- (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 groundwater 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

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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 runoff;
- (D) Management of collection and holding facilities associated with run-on and runoff 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 runoff 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" (incorporated by reference at WAC 173-

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- 303-110 (3)(g)(viii)) or other engineering texts acceptable to the department that present basic control device design information. The design analysis must 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. 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 must 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 runoff 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

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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 runoff 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 runoff, 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 270.27 are incorporated by reference.
- (n) When an owner or operator of a cement or lightweight aggregate kiln demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of part 63, subpart EEE), the requirements of this subsection do not apply, except those provisions the director determines are necessary to ensure compliance with 40 CFR 266.102 (e)(1) and 266.102 (e)(2)(iii) if you elect to comply with 40 CFR 270.235 (a)(1)(i), which is incorporated by reference at WAC 173-303-841, to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the director may apply the provisions of this subsection, on a case-by-case basis, for purposes of information collection in accordance with WAC 173-303-800(11) and 173-303-815 (2)(b)(ii).
- (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.

Note: See public notice requirements at WAC 173-303-281(5).

- (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 department receives an application form and any supplemental information which are completed to the department's satisfaction. The department may consider an application for a permit to be complete notwithstanding the failure of the owner or operator to submit the exposure information described in subsection (12) of this section. 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.

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- (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) Exposure information. Any part B permit application submitted by an owner or operator of a facility that stores, treats, or disposes dangerous waste in a surface impoundment or a landfill must be accompanied by information, reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to dangerous wastes or dangerous constituents through releases related to the unit. At a minimum, such information must address:
- (a) Reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;
- (b) The potential pathways of human exposure to dangerous waste or constituents resulting from the releases described under (a) of this subsection; and
- (c) The potential magnitude and nature of the human exposure resulting from such releases.
- (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.
- (17)(a) If the department concludes, based on one or more of the factors listed in (a)(i) through (ix) of this subsection, that compliance with the standards of 40 CFR part 63, subpart EEE alone may not be protective of human health or the environment, the department will require the additional information or assessment(s) necessary to determine whether additional controls are necessary to ensure protection of human health and the environment. This includes information necessary to evaluate the potential risk to human health and/or the environment resulting from both direct and indirect exposure pathways. The department may also require a permittee or applicant to provide information necessary to determine whether such an assessment(s) should be required.

The department will base the evaluation of whether compliance with the standards of 40 CFR part 63, subpart EEE alone is protective of human health or the environment on factors relevant to the potential risk from a hazardous waste combustion unit, including, as appropriate, any of the following factors:

- (i) Particular site-specific considerations such as proximity to receptors (such as schools, hospitals, nursing homes, day care centers, parks, community activity centers, or other potentially sensitive receptors), unique dispersion patterns, etc.;
- (ii) Identities and quantities of emissions of persistent, bioaccumulative or toxic pollutants considering enforceable controls in place to limit those pollutants;
- (iii) Identities and quantities of nondioxin products of incomplete combustion most likely to be emitted and to pose significant risk based on known toxicities (confirmation of which should be made through emissions testing);
- (iv) Identities and quantities of other off-site sources of pollutants in proximity of the facility that significantly influence interpretation of a facility-specific risk assessment;
- (v) Presence of significant ecological considerations, such as the proximity of a particularly sensitive ecological area:
- (vi) Volume and types of wastes, for example wastes containing highly toxic constituents;
- (vii) Other on-site sources of hazardous air pollutants that significantly influence interpretation of the risk posed by the operation of the source in question;
- (viii) Adequacy of any previously conducted risk assessment, given any subsequent changes in conditions likely to affect risk; and
  - (ix) Such other factors as may be appropriate.
  - (b) Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-806, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-806, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-806, filed 3/13/03, effective 4/13/03. 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. When an owner or operator of a dangerous waste incineration unit becomes subject to dangerous waste permit requirements after October 12, 2005, or when an owner or operator of an existing dangerous waste incineration unit demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (that is, by conducting a comprehensive performance test and submitting a Notification of Compliance under 63.1207(j) and 63.1210(d) documenting compliance with all applicable requirements of part 63, subpart EEE), the requirements of this section do not apply, except those provisions the department determines are necessary to ensure compliance with WAC 173-303-670 (6)(a) and (c) if you elect to

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comply with 40 CFR 270.235 (a)(1)(i), which is incorporated by reference at WAC 173-303-841, to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the department may apply the provisions of this section on a case-by-case basis, for purposes of information collection in accordance with WAC 173-303-800(11) and 173-303-815 (2)(b)(ii). 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). Note that if you are subject to Part 63 you must get an air permit from ecology or the local air authority.

- (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 as approved by the department:
- (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:

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- (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<sub>2</sub>, hydrogen chloride (HC1 [HCl]), carbon monoxide (CO) and dangerous combustion by-products, including the total mass emission rate of by-products 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 will 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

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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 anticipated 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-807, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-807, filed 11/30/04, effective 1/1/05; 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 10/19/95, 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 condi-

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tions 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 laboratory 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

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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 <sup>1</sup>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, the certification required by WAC 173-303-380 (1)(q), 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.

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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 groundwater monitoring wells and associated groundwater 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 decisionmaking 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 must 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(5);
- (ii) Unmanifested waste report as required by WAC 173-303-390(1); and
  - (iii) Annual report as required by WAC 173-303-390(2).
  - (15) Confidentiality.
- (a) Information submitted by the owner/operator of a facility identified as confidential will be treated in accordance with chapter 42.17 RCW and RCW 43.21A.160.
  - (b) Proprietary information can be held confidential if:
- (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 (6)(b). The information repository will be governed by the provisions in WAC 173-303-281 (6)(c) through (f).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-810, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-810, filed 11/30/04, effective 1/1/05; 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 173-303-811 Permits for boilers and industrial furnaces burning hazardous waste. The introductory paragraph of 40 CFR 270.66 is incorporated by reference. It applies to an owner or operator of a cement or lightweight aggregate kiln that demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-811, filed 11/30/04, effective 1/1/05.]

# 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) If, as the result of an assessment(s) or other information, the department or director determines that conditions are necessary in addition to those required under 40 CFR parts 63, subpart EEE, WAC 173-303-280 through 173-303-395, WAC 173-303-505, 173-303-510, 173-303-520, 173-303-525, 173-303-578, and 173-303-600 through 173-303-695 to ensure protection of human health and the environment, he or she must include those terms and conditions in a dangerous waste permit for a dangerous waste combustion unit.

- (c) 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).
- (d) 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 subsection (1) of this section.
- (e) 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:

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- (A) The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or
- (B) The permittee must 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 will 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 will 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 will lead to timely compliance with applicable requirements;
- (C) The second schedule will lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements;
- (D) Each permit containing two schedules will include a requirement that after the permittee has made a final decision under (b)(iii)(A) of this subsection it must 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 must 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. 09-14-105 (Order 07-12), § 173-303-815, filed 6/30/09, effective 7/31/09; 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 director. 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

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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 rea-

- sons 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 11 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.

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- (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 modification 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)(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

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- (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.

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- (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 groundwater 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.
- (j) Combustion facility changes to meet 40 CFR part 63 MACT standards. (Note that 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). If you are subject to Part 63, you must get an air permit from ecology or the local air authority.) The following procedures apply to hazardous waste combustion facility permit modifications requested under Appendix I of this section, section L.9.
- (i) Facility owners or operators must have complied with the Notification of Intent to Comply requirements of 40 CFR 63.1210 that were in effect prior to October 11, 2000 (see 40 CFR Part 63 sections 63.1200 63.1499 revised as of July 1, 2000) in order to request a permit modification under this section for the purpose of technology changes needed to meet the standards under 40 CFR 63.1203, 63.1204, and 63.1205.
- (ii) Facility owners or operators must comply with the Notification of Intent to Comply (NIC) requirements of 40

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- CFR 63.1210(b) and 63.1212(a) before a permit modification can be requested under this subsection for the purpose of technology changes needed to meet the 40 CFR 63.1215, 63.1216, 63.1217, 63.1218, 63.1219, 63.1220, and 63.1221 standards promulgated on October 12, 2005.
- (iii) If the department does not approve or deny the request within ninety days of receiving it, the request will be deemed approved. The director may extend this ninety-day deadline one time for up to thirty days by notifying the facility owner or operator.
- (k) Waiver of dangerous waste permit conditions in support of transition to the 40 CFR part 63 MACT standards. (Note that 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). If you are subject to Part 63, you must get an air permit from ecology or the local air authority.)
- (i) You may request to have specific Hazardous Waste Management Act and dangerous waste regulation operating and emissions limits waived by submitting a Class 1 permit modification request under Appendix I of this section, section L(10). You must:
- (A) Identify the specific dangerous waste permit operating and emissions limits which you are requesting to waive;
- (B) Provide an explanation of why the changes are necessary in order to minimize or eliminate conflicts between the dangerous waste permit and MACT compliance; and
- (C) Discuss how the revised provisions will be sufficiently protective.
- (D) The department will approve or deny the request within thirty days of receipt of the request. The department may, at its discretion, extend this thirty-day deadline one time for up to thirty days by notifying the facility owner or opera-
- (ii) To request this modification in conjunction with MACT performance testing where permit limits may only be waived during actual test events and pretesting, as defined under 40 CFR 63.1207 (h)(2)(i) and (ii), for an aggregate time not to exceed seven hundred twenty hours of operation (renewable at the discretion of the department) you must:
- (A) Submit your modification request to the director at the same time you submit your test plans to the department;
- (B) The department may elect to approve or deny the request contingent upon approval of the test plans.

### 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

Modifications	Class
5. Schedule of compliance:	
a. Changes in interim compliance dates, with	
prior approval of the director	11
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 <b>1</b>
7. Changes in ownership or operational control	1
of a facility, provided the procedures of subsection	
(2)(b) of this section are followed	11
8. Changes to remove permit conditions that are	
no longer applicable (i.e., because the standards upon which they are based are no longer applicable to the	
facility).	1 <b>1</b>
B. General Facility Standards	•
1. Changes to waste sampling or analysis meth-	
ods:	
a. To conform with agency guidance or regula-	1
b. To incorporate changes associated with	1
F039 (multisource leachate) sampling or analysis	
methods	11
c. To incorporate changes associated with under-	
lying dangerous constituents in ignitable or corrosive	1.1
wastes	<sup>1</sup> 1 2
2. Changes to analytical quality	2
assurance/control plan:	
a. To conform with agency guidance or regula-	
tions	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
<ul><li>5. Changes in the training plan:</li><li>a. That affect the type or decrease the amount of</li></ul>	
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 equip-	
ment 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 identi-	1
fied in the plan	1
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 unit) requires a change in facility plans or other	
facility standards, that change will be reviewed u	
same procedures as the permit modification.	
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C. Groundwater Protection		f. Extension of the closure period to allow a	
1. Changes to wells:		landfill, surface impoundment, or land treatment	
a. Changes in the number, location, depth, or		unit to receive nondangerous wastes after final	
design of upgradient or downgradient wells of permit-		receipt of dangerous wastes under WAC 173-303-	
ted groundwater monitoring system	2	610 (4)(d) and (e)	2
b. Replacement of an existing well that has been	_	2. Creation of a new landfill unit as part of	
damaged or rendered inoperable, without change to		closure	3
location, design, or depth of the well	1	3. Addition of the following new units to be used	-
2. Changes in groundwater sampling or analysis	1	temporarily for closure activities:	
			2
procedures or monitoring schedule, with prior	11	a. Surface impoundments	2
approval of the director	11	b. Incinerators	-
3. Changes in statistical procedure for determin-		c. Waste piles that do not comply with WAC 173-	_
ing whether a statistically significant change in		303-660 (1)(c)	-
groundwater quality between upgradient and down-		d. Waste piles that comply with WAC 173-303-	
gradient wells has occurred, with prior approval of the		660 (1)(c)	2
director	11	e. Tanks or containers (other than specified	
4. Changes in point of compliance	2	below)	2
5. Changes in indicator parameters, hazardous		f. Tanks used for neutralization, dewatering,	
constituents, or concentration limits (including		phase separation, or component separation, with prior	
ACLs):		approval of the director	11
a. As specified in the groundwater protection		g. Staging piles	2
standard	3	E. Post-Closure	_
b. As specified in the detection monitoring	5	1. Changes in name, address, or phone number of	
	2	contact in post-closure plan	1
program	2	2. Extension of post-closure care period	7
6. Changes to a detection monitoring program as			2
required by WAC 173-303-645 (9)(h), unless other-	2	3. Reduction in the post-closure care period	-
wise specified in this appendix	2	4. Changes to the expected year of final closure,	1
7. Compliance monitoring program:		where other permit conditions are not changed	J
a. Addition of compliance monitoring program		5. Changes in post-closure plan necessitated by	
as required by WAC 173-303-645 (9)(g)(iv) and		events occurring during the active life of the facility,	
(10)	3	including partial and final closure	2
b. Changes to a compliance monitoring program		F. Containers	
as required by WAC 173-303-645 (10)(j), unless oth-		1. Modification or addition of container units:	
erwise specified in this appendix	2	a. Resulting in greater than 25% increase in the	
8. Corrective action program:		facility's container storage capacity, except as pro-	
a. Addition of a corrective action program as		vided in F (1)(c) and F (4)(a) below	3
required by WAC 173-303-645 (10)(h)(ii) and		b. Resulting in up to 25% increase in the facility's	
(11)	3	container storage capacity, except as provided in F	
b. Changes to a corrective action program as	J	(1)(c) and F (4)(a) below	2
required by WAC 173-303-645 (11)(h), unless other-		c. Or treatment processes necessary to treat	
wise specified in this appendix	2	wastes that are restricted from land disposal to meet	
D. Closure	2	some or all of the applicable treatment standards or to	
1. Changes to the closure plan:		treat wastes to satisfy (in whole or in part) the standard	
a. Changes in estimate of maximum extent of		of "use of practically available technology that yields	
		the greatest environmental benefit" contained in 40	
operations or maximum inventory of waste on-site at		CFR 268.8 (a)(2)(ii), with prior approval of the direc-	
any time during the active life of the facility, with prior	11		
approval of the director	11	tor. This modification may also involve addition of	
b. Changes in the closure schedule for any unit,		new waste codes or narrative descriptions of wastes. It	
changes in the final closure schedule for the facility, or		is not applicable to dioxin-containing wastes (F020,	11
extension of the closure period, with prior approval of		021, 022, 023, 026, 027, and 028)	۱ ]
the director	11	2.	
c. Changes in the expected year of final closure,		a. Modification of a container unit without	
where other permit conditions are not changed, with		increasing the capacity of the unit	2
prior approval of the director	11	b. Addition of a roof to a container unit without	
d. Changes in procedures for decontamination of		alteration of the containment system	1
facility equipment or structures, with prior approval of		3. Storage of different wastes in containers:	
the director	11	a. That require additional or different manage-	
e. Changes in approved closure plan resulting		ment practices from those authorized in the permit,	
from unexpected events occurring during partial or		except as provided in F(4) below	3
final closure, unless otherwise specified in this appen-			
dix	2		

	do not require additional or different		2. Modification of a tank unit or secondary con-	
_	t practices from those authorized in the	2	tainment system without increasing the capacity of the unit	2
-	See (g) of this subsection for modification procedure		3. Replacement of a tank with a tank that meets	2
Note:	used for the management of newly listed or iden		the same design standards and has a capacity within	
	wastes.		+/- 10% of the replaced tank provided	1
4 Stor	rage or treatment of different wastes in		-The capacity difference is no more than 1500	
containers:	=		gallons,	
a. Tha	t require addition of units or change in		-The facility's permitted tank capacity is not	
	process or management standards, pro-		increased, and	
	the wastes are restricted from land dis-		-The replacement tank meets the same condi-	
	are to be treated to meet some or all of the		tions in the permit. 4. Modification of a tank management	
	treatment standards, or that are to be		practice	2
	atisfy (in whole or in part) the standard of		5. Management of different wastes in tanks:	_
	ctically available technology that yields		a. That require additional or different manage-	
	t environmental benefit" contained in 40 (a)(2)(ii). This modification is not appli-		ment practices, tank design, different fire protection	
	exin-containing wastes (F020, 021, 022,		specifications, or significantly different tank treat-	
	27, and 028)	11	ment process from that authorized in the permit,	
	t do not require the addition of units or a		except as provided in G (5)(c) below	3
	he treatment process or management		b. That do not require additional or different	
	and provided that the units have previ-		management practices, tank design, different fire	
	ved wastes of the same type (e.g., inciner-		protection specifications, or significantly different tank treatment process than authorized in the permit,	
	per water). This modification is not appli-		except as provided in G (5)(d)	2
	oxin-containing wastes (F020, 021, 022,	11	c. That require addition of units or change in	_
023, 026, 0 G. Tanks	(27, and 028)	11	treatment processes or management standards, pro-	
0. Taliks 1.			vided that the wastes are restricted from land dis-	
	dification or addition of tank units result-		posal and are to be treated to meet some or all of the	
	ter than 25% increase in the facility's tank		applicable treatment standards or that are to be	
	xcept as provided in G (1)(c), G (1)(d),		treated to satisfy (in whole or in part) the standard of	
and G (1)(e	e) below	3	"use of practically available technology that yields	
	dification or addition of tank units result-		the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii). The modification is not appli-	
	25% increase in the facility's tank capac-		cable to dioxin-containing wastes (F020, 021, 022,	
	as provided in G (1)(d) and G (1)(e)	2	023, 026, 027, and 028)	11
	lition of a new tank that will operate for	2	(d) That do not require the addition of units or a	
	90 days using any of the following physi-		change in the treatment process or management	
	nical treatment technologies: Neutraliza-		standards, and provided that the units have previ-	
	tering, phase separation, or component		ously received waste of the same type (e.g., inciner-	
separation		2	ator scrubber water). This modification is not appli-	
	er prior approval of the director, addition		cable to dioxin-containing wastes (F020, 021, 022,	1
	nk that will operate for up to 90 days		023, 026, 027, and 028)	_
	of the following physical or chemical		Note: See (g) of this subsection for modification procedure used for the management of newly listed or ider	
	echnologies: Neutralization, dewatering,	11	wastes.	itiiica
	ration, or component separation diffication or addition of tank units or	11	H. Surface Impoundments	
	processes necessary to treat wastes that are		1. Modification or addition of surface	
	from land disposal to meet some or all of		impoundment units that result in increasing the	
	ble treatment standards or to treat wastes		facility's surface impoundment storage or treatment	
	n whole or in part) the standard of "use of		capacity	3
practically	available technology that yields the		2. Replacement of a surface impoundment unit	
	vironmental benefit" contained in 40			3
	(a)(2)(ii), with prior approval of the		3. Modification of a surface impoundment unit	
	his modification may also involve addi-		without increasing the facility's surface impound- ment storage or treatment capacity and without	
	waste codes. It is not applicable to taining wastes (F020, 021, 022, 023, 026,		modifying the unit's liner, leak detection system, or	
	28)	<sup>1</sup> <b>1</b>	leachate collection system	2
021, and 02	<del>-</del> 0,	1	4. Modification of a surface impoundment	
			management practice	2

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5. Treatment, storage, or disposal of different wastes in surface impoundments:		b. That do not require additional or different management practices or different design of the unit	2
a. That require additional or different manage-		6. Conversion of an enclosed waste pile to a con-	2
ment practices or different design of the liner		tainment building unit	2
or leak detection system than authorized in the permit	2	Note: See (g) of this subsection for modification procedures to	
b. That do not require additional or different	3	used for the management of newly listed or identification wastes.	iea
management practices or different design of the		L. Landfills and Unanaloged Wasta Diles	
liner or leak detection system than authorized in the		J. Landfills and Unenclosed Waste Piles  1. Modification or addition of landfill units that	
permit	2	result in increasing the facility's disposal capacity	3
c. That are wastes restricted from land disposal that meet the applicable treatment standards or that		2. Replacement of a landfill	3
are treated to satisfy the standard of "use of practi-		3. Addition or modification of a liner, leachate	
cally available technology that yields the greatest		collection system, leachate detection system, runoff	3
environmental benefit" contained in 40 CFR 268.8		control, or final cover system	3
(a)(2)(ii), and provided that the unit meets the min-		a liner, leachate collection system, leachate detection	
imum technological requirements stated in 40 CFR 268.5 (h)(2). This modification is not applicable to		system, runoff control, or final cover system	2
dioxin-containing wastes (F020, 021, 022, 023,		5. Modification of a landfill management	_
026, 027, and 028)	1	practice	2
d. That are residues from wastewater treatment		<ul><li>6. Landfill different wastes:</li><li>a. That require additional or different manage-</li></ul>	
or incineration, provided that disposal occurs in a		ment practices, different design of the liner, leachate	
unit that meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2), and provided		collection system, or leachate detection system	3
further that the surface impoundment has previ-		b. That do not require additional or different man-	
ously received wastes of the same type (for exam-		agement practices, different design of the liner, leach-	2
ple, incinerator scrubber water). This modification		ate collection system, or leachate detection system c. That are wastes restricted from land disposal	2
is not applicable to dioxin-containing wastes		that meet the applicable treatment standards or that are	
(F020, 021, 022, 023, 026, 027, and 028) 6. Modifications of unconstructed units to	1	treated to satisfy the standard of "use of practically	
comply with WAC 173-303-650 (2)(j), (10), (11),		available technology that yields the greatest environ-	
and (4)(d)	<sup>1</sup> 1	mental benefit" contained in 40 CFR 268.8 (a)(2)(ii),	
7. Changes in response action plan:		and provided that the landfill unit meets the minimum technological requirements stated in 40 CFR 268.5	
a. Increase in action leakage rate	3	(h)(2). This modification is not applicable to dioxin-	
b. Change in a specific response reducing its frequency or effectiveness	2	containing wastes (F020, 021, 022, 023, 026, 027, and	
c. Other changes	3 2	028)	1
Note: See (g) of this subsection for modification procedures		d. That are residues from wastewater treatment or	
used for the management of newly listed or iden		incineration, provided that disposal occurs in a landfill unit that meets the minimum technological require-	
wastes.		ments stated in 40 CFR 268.5 (h)(2), and provided fur-	
I. Enclosed Waste Piles. For all waste piles except		ther that the landfill has previously received wastes of	
those complying with WAC 173-303-660 (1)(c), mod- fications are treated the same as for a landfill. The fol-		the same type (for example, incinerator ash). This	
owing modifications are applicable only to waste		modification is not applicable to dioxin-containing	1
piles complying with WAC 173-303-660 (1)(c).		wastes (F020, 021, 022, 023, 026, 027, and 028) 7. Modifications of unconstructed units to comply	1
1. Modification or addition of waste pile units:		with WAC 173-303-660 (2)(j), (11), (12), (5)(c), 173-	
a. Resulting in greater than 25% increase in the	2	303-665 (2)(h), (8), (4)(c), and (9)	11
facility's waste pile storage or treatment capacity b. Resulting in up to 25% increase in the facility's	3	8. Changes in response action plan:	_
waste pile storage or treatment capacity	2	a. Increase in action leakage rate	3
2. Modification of waste pile unit without increas-		b. Change in a specific response reducing its frequency or effectiveness.	3
ng the capacity of the unit	2	c. Other changes	2
3. Replacement of a waste pile unit with another		Note: See (g) of this subsection for modification procedures to	) he
waste pile unit of the same design and capacity and neeting all waste pile conditions in the permit	1	used for the management of newly listed or identif	
4. Modification of a waste pile management prac-	1	wastes.	
rice	2	K. Land Treatment	
5. Storage or treatment of different wastes in		1. Lateral expansion of or other modification of a	^
waste piles:		land treatment unit to increase areal extent	3
a. That require additional or different management practices or different design of the unit	3	Modification of run-on control system	2
r r			_

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4. Other modifications of land treatment unit		1 /. Changes to allow a second land treatment	
component specifications or standards required in per-		demonstration to be conducted when the results of the	
mit	2	first demonstration have not shown the conditions	
5. Management of different wastes in land treat-		under which the wastes can be treated completely,	
ment units:		where the conditions for the second demonstration are	
a. That require a change in permit operating con-		not substantially the same as the conditions for the first	
ditions or unit design specifications	3	demonstration	3
b. That do not require a change in permit operat-		18. Changes in vegetative cover requirements for	
ing conditions or unit design specifications	2	closure	2
Note: See (g) of this subsection for modification procedures	s to be	L. Incinerators, Boilers, and Industrial Furnaces	
used for the management of newly listed or iden	tified	1. Changes to increase by more than 25% any of	
wastes.		the following limits authorized in the permit: A ther-	
6. Modification of a land treatment unit manage-		mal feed rate limit, a feedstream feed rate limit, a	
ment practice to:		chlorine/chloride feed rate limit, a metal feed rate	
a. Increase rate or change method of waste		limit, or an ash feed rate limit. The director will	
application	3	require a new trial burn to substantiate compliance	
b. Decrease rate of waste application	2	with the regulatory performance standards unless this	
7. Modification of a land treatment unit manage-	2	demonstration can be made through other means	3
ment practice to change measures of pH or mois		2. Changes to increase by up to 25% any of the	
ture content, or to enhance microbial or chemical		following limits authorized in the permit: A thermal	
reactions	2	feed rate limit, a feedstream feed rate limit, a	
8. Modification of a land treatment unit manage-	2	chlorine/chloride feed rate limit, a metal feed rate	
ment practice to grow food chain crops, to add to or		limit, or an ash feed rate limit. The director will	
replace existing permitted crops with different food		require a new trial burn to substantiate compliance	
chain crops, or to modify operating plans for distribu-		with the regulatory performance standards unless this	
tion of animal feeds resulting from such crops	3	demonstration can be made through other means	2
9. Modification of operating practice due to detec-		3. Modification of an incinerator, boiler, or indus-	
tion of releases from the land treatment unit pursuant		trial furnace unit by changing the internal size or	
to WAC 173-303-655 (6)(g)(ii)	3	geometry of the primary or secondary combustion	
10. Changes in the unsaturated zone monitoring		units, by adding a primary or secondary combustion	
system, resulting in a change to the location, depth,		unit, by substantially changing the design of any com-	
number of sampling points, or replace unsaturated		ponent used to remove HC1/C1 <sub>2</sub> , metals, or particulate	
zone monitoring devices or components of devices		from the combustion gases, or by changing other fea-	
with devices or components that have specifications		tures of the incinerator, boiler, or industrial furnace	
different from permit requirements	3	that could affect its capability to meet the regulatory	
11. Changes in the unsaturated zone monitoring		performance standards. The director will require a new	
system that do not result in a change to the location,		trial burn to substantiate compliance with the regula-	
depth, number of sampling points, or that replace		tory performance standards unless this demonstration	-
unsaturated zone monitoring devices or components of		can be made through other means	3
devices with devices or components having specifica-			
tions different from permit requirements	2	trial furnace unit in a manner that would not likely affect the capability of the unit to meet the regulatory	
12. Changes in background values for hazardous		performance standards but which would change the	
constituents in soil and soil-pore liquid	2	operating conditions or monitoring requirements spec-	
13. Changes in sampling, analysis, or statistical	_	ified in the permit. The director may require a new trial	
procedure	2	burn to demonstrate compliance with the regulatory	
14. Changes in land treatment demonstration pro-	•	performance standards	9
gram prior to or during the demonstration	2	5. Operating requirements:	_
15. Changes in any condition specified in the per-		a. Modification of the limits specified in the per-	
mit for a land treatment unit to reflect results of the		mit for minimum or maximum combustion gas tem-	
land treatment demonstration, provided performance		perature, minimum combustion gas residence time,	
standards are met, and the director's prior approval has	2	oxygen concentration in the secondary combustion	
been received	2	chamber flue gas carbon monoxide and hydrocarbon	
demonstration to be conducted when the results of the		concentration, maximum temperature at the inlet to	
first demonstration have not shown the conditions		the particulate matter emission control system, or	
under which the wastes can be treated completely, pro-		operating parameters for the air pollution control sys-	
vided the conditions for the second demonstration are		tem. The director will require a new trial burn to sub-	
substantially the same as the conditions for the first		stantiate compliance with the regulatory performance	
demonstration and have received the prior approval of		standards unless this demonstration can be made	
the director	2	through other means	3

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b. Modification of any stack gas emission limits		a. Resulting in greater than 25% increase in the
specified in the permit, or modification of any condi-		facility's containment building storage or treatment
tions in the permit concerning emergency shutdown or		capacity
automatic waste feed cutoff procedures or controls	3	b. Resulting in up to 25% increase in the
c. Modification of any other operating condition		facility's containment building storage or treatment
or any inspection or recordkeeping requirement speci-		capacity
fied in the permit	2	2. Modification of a containment building unit of
6. Burning different wastes:		secondary containment system without increasing the
a. If the waste contains a POHC that is more diffi-		capacity of the unit.
cult to burn than authorized by the permit or if burning		3. Replacement of a containment building with a
of the waste requires compliance with different regula-		containment building that meets the same design star
tory performance standards than specified in the per-		dards provided:
mit. The director will require a new trial burn to sub-		a. The unit capacity is not increased
stantiate compliance with the regulatory performance		b. The replacement containment building meets
standards unless this demonstration can be made		the same conditions in the permit.
through other means	3	4. Modification of a containment building man-
b. If the waste does not contain a POHC that is		agement practice.
more difficult to burn than authorized by the permit		5. Storage or treatment of different wastes in cor
and if burning of the waste does not require compli-		tainment buildings:
ance with different regulatory performance standards		a. That require additional or different manage-
than specified in the permit	2	ment practices.
Note: See (g) of this subsection for modification procedures	to be	b. That do not require additional or different mar
used for the management of newly listed or identi	ified	agement practices
wastes.		N. Corrective Action
7. Shakedown and trial burn:		1. Approval of a corrective action management
a. Modification of the trial burn plan or any of the		unit pursuant to WAC 173-303-64640, 173-303-
permit conditions applicable during the shakedown		64650, 173-303-64660, and 173-303-64670
period for determining operational readiness after con-		2. Approval of a temporary unit or time exten-
struction, the trial burn period, or the period immedi-		sion for a temporary unit pursuant to WAC 173-303-
ately following the trial burn	2	64680
b. Authorization of up to an additional 720 hours	_	3. Approval of a staging pile or staging pile oper
of waste burning during the shakedown period for		ating term extension
determining operational readiness after construction,		<ol> <li>Modification to incorporate a corrective action</li> </ol>
with the prior approval of the director	11	order issued pursuant to MTCA
c. Changes in the operating requirements set in	•	5. Modification or amendment of a corrective
the permit for conducting a trial burn, provided the		action order issued pursuant to MTCA when the
change is minor and has received the prior approval of		MTCA public participation requirements are met and
the director	11	order has already been incorporated by reference into
d. Changes in the ranges of the operating require-	-	the permit
ments set in the permit to reflect the results of the trial		<sup>1</sup> Class 1 modifications requiring prior Agency approval
burn, provided the change is minor and has received		
the prior approval of the director	11	(5) Permit termination. The director will fol
8. Substitution of an alternate type of nondanger-		applicable procedures in WAC 173-303-840, proced
ous fuel that is not specified in the permit	1	decision making, in terminating any permit. The fo
9. Technology changes needed to meet stand-		are causes for terminating a permit during its terr
ards under 40 CFR part 63 (subpart EEE-National		denying a permit renewal application:
Emission Standards for Hazardous Air Pollutants		(a) Noncompliance by the permittee with any co
from Hazardous Waste Combustors), that are incorpo-		of the permit;
rated by reference at WAC 173-400-075 (5)(a) pro-		(b) The permittee's failure in the application of
vided the procedures of WAC 173-303-830 (4)(j) are		the permit issuance process to disclose fully all releva
followed.	11	or the permittee's misrepresentation of any relevant
10. Changes to dangerous waste permit provisions		any time; or
needed to support transition to 40 CEP port 62 (Sub		(c) A determination that the permitted activity en

3 p to 25% increase in the building storage or treatment 2 of a containment building unit or nt system without increasing the 2 of a containment building with a that meets the same design stancity is not increased. . . . . . . . . . 1 ent containment building meets n the permit. .......... of a containment building man-2 atment of different wastes in condditional or different manage-3 quire additional or different man-2 corrective action management 173-303-64640, 173-303-50, and 173-303-64670 . . . . . . . . 3 temporary unit or time extenunit pursuant to WAC 173-303-2 staging pile or staging pile oper-to incorporate a corrective action to MTCA ..... 3 or amendment of a corrective ursuant to MTCA when the pation requirements are met and n incorporated by reference into 1 quiring prior Agency approval ination. The director will follow the s in WAC 173-303-840, procedures for terminating any permit. The following nating a permit during its term or for ewal application: ice by the permittee with any condition e's failure in the application or during ocess to disclose fully all relevant facts,

srepresentation 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 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-830, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-830, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-830, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW

M. Containment Buildings 1. Modification or addition of containment build-

ing units:

needed to support transition to 40 CFR part 63 (Sub-

Air Pollutants From Hazardous Waste Combustors) provided the procedures of (4)(k) of this section are

part EEE-National Emission Standards for Hazardous

11

followed.

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 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 preapplication and application stages are at WAC 173-303-281 (3) through (5).

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- (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

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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 173-303-841 Integration with maximum achievable control technology (MACT) standards. 40 CFR 270.235, Options for incinerators and cement and lightweight aggregate kilns to minimize emissions from startup, shutdown, and malfunction events, is incorporated by reference. The incorporated provision is 40 CFR Part 270 Subpart I, Integration with maximum achievable control technology (MACT) standards.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-841, filed 11/30/04, effective 1/1/05.]

WAC 173-303-845 Appeal of decision. Any person who is adversely affected by a decision of the department

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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 dangerous 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:
- (i) Owners/operators of facilities or portions of facilities applying for research, development and demonstration permits, pursuant to WAC 173-303-809 or section 3005(g) of the Resource Conservation and Recovery Act, codified in 40 CFR Part 270.65;
- (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. 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;
- (v) Owners/operators of facilities who seek to obtain a dangerous waste permit for waste storage and satisfy all of the following:
- (A) The facility recycles dangerous waste in a process that is exempt from dangerous waste permitting.
- (B) Waste storage is used strictly to support the exempt recycling.
- (C) Waste storage is in tanks, containers, or a containment building.
  - (D) Waste storage is indoors; or
- (vi) Owners/operators of existing designated zone facilities as defined in this section seeking a significant expansion.
- (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:

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- (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.

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- (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,

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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. 09-14-105 (Order 07-12), § 173-303-902, filed 6/30/09, effective 7/31/09; 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.]

(6/30/09) [Ch. 173-303 WAC—p. 215]

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 twenty-one 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 at WAC 173-303-110(3) and in a document which will be available from the department.
- (3) Petitions for exempting dangerous wastes from a particular generator. Note that a generator must also petition the U.S. EPA to exempt their waste if it is a federally listed waste.
- (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 calibra-

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tion 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:

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- (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

- P.O. 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 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 twenty-one 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,

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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. 09-14-105 (Order 07-12), § 173-303-910, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-910, filed 11/30/04, effective 1/1/05. 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 10/19/95, 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. Notwithstanding any other provision of this

chapter, the department may direct the attorney general to bring actions for injunctive, declaratory, or other relief to enforce any requirement of this chapter, or to bring suit to immediately restrain or obtain such other relief as may be necessary against any person contributing to the handling, storage, treatment, transportation, recycling, or disposal of any dangerous waste or solid waste that may present an imminent and substantial endangerment to health or the environment.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-960, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-960, filed 6/3/86.]

#### WAC 173-303-9901 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-9901, filed 6/30/09, effective 7/31/09. 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 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-9902, filed 6/30/09, effective 7/31/09. 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. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by Dangerous Waste Number.

The "P" wastes and their corresponding Dangerous Waste Numbers are:

#### Alphabetical List

Dangerous	Chemical	
Waste No.	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 <sub>3</sub> AsO <sub>4</sub>
P012	1327-53-3	Arsenic oxide As <sub>2</sub> O <sub>3</sub>
P011	1303-28-2	Arsenic oxide As <sub>2</sub> O <sub>5</sub>
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide

The "P" wa	stes and their co	rresponding Dangerous Waste Numbers	The "P" wa	stes and their co	rresponding Dangerous Waste Numbers
are: Alphabetical List			Alphabetica	l List	
Dangerous	Chemical		Dangerous	Chemical	
Waste No.	Abstracts No.	Substance	Waste No.	Abstracts No.	Substance
P038	692-42-2	Arsine, diethyl-	P060	465-73-6	1,4,5,8-Dimethanonaphthalene,
P036	696-28-6	Arsonous dichloride, phenyl-			1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-
P054	151-56-4	Aziridine			hexahydro-, (1alpha,4alpha,4abeta,5beta,
P067	75-55-8	Aziridine, 2-methyl-			8beta,8abeta)-
P013	542-62-1	Barium cyanide	P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene,
P024	106-47-8	Benzenamine, 4-chloro-			3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-
P077	100-01-6	Benzenamine, 4-nitro-			octahydro-, (1aalpha,2beta,2aalpha,3beta,
P028 P042	100-44-7 51-43-4	Benzene, (chloromethyl)- 1,2-Benzenediol, 4-[1-hydroxy-2-(methyl- amino)ethyl]-, (R)-	P051	172-20-8	6beta,6aalpha,7beta, 7aalpha)- 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-			octahydro-, (1aalpha,2beta,2abeta,3alpha,
P014	108-98-5	Benzenethiol			6alpha,6abeta,7beta, 7aalpha)-, & metabo-
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-,			lites
		methylcarbamate	P044	60-51-5	Dimethoate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with	P046	122-09-8	alpha,alpha-Dimethylphenethylamine
		(3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-	P047	<sup>1</sup> 534-52-1	4,6-Dinitro-o-cresol, & salts
		trimethylpyrrolo[2,3-b]indo1-5-yl methyl-	P048	51-28-5	2,4-Dinitrophenol
D001	101.01.0	carbamate ester (1:1)	P020	88-85-7	Dinoseb
P001	<sup>1</sup> 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present	P085	152-16-9	Diphosphoramide, octamethyl-
		at concentrations greater than 0.3%	P111	107-49-3	Diphosphoric acid, tetraethyl ester
P028	100-44-7	Benzyl chloride	P039	298-04-4	Disulfoton
P028 P015	7440-41-7	Beryllium powder	P049 P185	541-53-7 26419-73-8	Dithiobiuret 1,3-Dithiolane-2-carboxaldehyde,
P017	598-31-2	Bromoacetone	F103	20419-73-6	2,4-dimethyl-, O- [(methylamino)-
P018	357-57-3	Brucine			carbonyl]oxime
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-	P050	115-29-7	Endosulfan
		(methylthio)-, O-	P088	145-73-3	Endothall
		[(methylamino)carbonyl] oxime	P051	72-20-8	Endrin
P021	592-01-8	Calcium cyanide	P051	72-20-8	Endrin, & metabolites
P189	55285-14-8	Carbamic acid, [(dibutylamino)-	P042	51-43-4	Epinephrine
		thio]methyl-, 2,3-dihydro-2,2-	P031	460-19-5	Ethanedinitrile
		dimethyl- 7-benzofuranyl ester	P194	23135-22-0	Ethanimidothioic acid, 2-
P191	644-64-4	Carbamic acid, dimethyl-, 1-			(dimethylamino)-N-[[(methylamino)
		[(dimethyl-amino)carbonyl]- 5-			carbonyl]oxy]-2-oxo-, methyl ester
D102	110 20 0	methyl- 1H-pyrazol-3-yl ester	P066	16752-77-5	Ethanimidothioic acid, N-
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-			[[(methylamino)carbonyl]oxy]-,
		1- (1-methylethyl)-1H- pyrazol-5-yl	D101	107.12.0	methyl ester
P190	1129-41-5	ester Carbamic acid, methyl-, 3-	P101	107-12-0	Ethyl cyanide
F 190	1129-41-3	methylphenyl ester	P054 P097	151-56-4 52-85-7	Ethyleneimine
P127	1563-66-2	Carbofuran	P056	7782-41-4	Famphur Fluorine
P021	592-01-8	Calcium cyanide Ca(CN) <sub>2</sub>	P057	640-19-7	Fluoroacetamide
P022	75-15-0	Carbon disulfide	P058	62-74-8	Fluoroacetic acid, sodium salt
P189	55285-14-8	Carbosulfan	P198	23422-53-9	Formetanate hydrochloride
P095	75-44-5	Carbonic dichloride	P197	17702-57-7	Formparanate
P023	107-20-0	Chloroacetaldehyde	P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P024	106-47-8	p-Chloroaniline	P059	76-44-8	Heptachlor
P026	5344-82-1	1-(o-Chlorophenyl)thiourea	P062	757-58-4	Hexaethyl tetraphosphate
P027	542-76-7	3-Chloropropionitrile	P116	79-19-6	Hydrazinecarbothioamide
P029	544-92-3	Copper cyanide	P068	60-34-4	Hydrazine, methyl-
P029	544-92-3	Copper cyanide Cu(CN)	P063	74-90-8	Hydrocyanic acid
P202	64-00-6	m-Cumenyl methylcarbamate	P063	74-90-8	Hydrogen cyanide
P030		Cyanides (soluble cyanide salts), not other-	P096	7803-51-2	Hydrogen phosphide
2021	460 40 7	wise specified	P060	465-73-6	Isodrin
P031	460-19-5	Cyanogen	P192	119-38-0	Isolan
P033	506-77-4	Cyanogen chloride Cyanogen chloride (CN)Cl	P202	64-00-6	3-Isopropylphenyl N- methylcarbamate
P033 P034	506-77-4	2-Cyclohexyl-4,6-dinitrophenol	P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P034 P016	131-89-5 542-88-1	Dichloromethyl ether	P196	15339-36-3	Manganese,
P036	696-28-6	Dichlorophenylarsine	1170	13337-30-3	bis(dimethylcarbamodithioato-S,S')-
P037	60-57-1	Dieldrin	P196	15339-36-3	Manganese dimethyldithiocarbamate
P038	692-42-2	Diethylarsine	P092	62-38-4	Mercury, (acetato-O)phenyl-
P041	311-45-5	Diethyl-p-nitrophenyl phosphate	P065	628-86-4	Mercury fulminate (R,T)
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate	P198	23422-53-9	Methanimidamide, N,N-dimethyl-
P043	55-91-4	Diisopropylfluorophosphate (DFP)			N'-[3-[[(methylamino)-
P191	644-64-4	Dimetilan			carbonyl]oxy]phenyl]-,
P004	309-00-2	1,4,5,8-Dimethanonaphthalene,			monohydrochloride
		1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-	P197	17702-57-7	Methanimidamide, N,N-dimethyl-
		hexahydro-, (lalpha,4alpha,4abeta,5alpha,			N'-[2-methyl-4-
		8alpha,8abeta)-			[[(methylamino)carbonyl]oxy]
					phenyl]-

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The "P" wastes and their corresponding Dangerous Waste Numbers		The "P" wastes and their corresponding Dangerous Waste Numbers					
	are: Alphabetical List			are: Alphabetical List			
Dangerous	Chemical		Dangerous	Chemical			
Waste No.	Abstracts No.	Substance	Waste No.	Abstracts No.	Substance		
P082	62-75-9	Methanamine, N-methyl-N-nitroso-	P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethyl-		
P064	624-83-9	Methane, isocyanato-			amino)sulfonyl]phenyl] O,O-dimethyl ester		
P016	542-88-1	Methane, oxybis[chloro-	~~~	•••			
P112	509-14-8	Methane, tetranitro- (R)	P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-		
P118	75-70-7	Methanethiol, trichloro-			nitrophenyl) ester		
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin,	P204	57-47-6	Physostigmine		
		6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-	P188	57-64-7	Physostigmine salicylate		
D050	76 44 9	hexahydro-, 3-oxide	P110	78-00-2	Plumbane, tetraethyl-		
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-hep-	P098	151-50-8	Potassium cyanide		
D100	2022 (5.7	tachloro-3a,4,7,7a-tetrahydro-	P098	151-50-8	Potassium cyanide K(CN)		
P199 P066	2032-65-7 16752-77-5	Methiocarb Methomyl	P099 P201	506-61-6 2631-37-0	Potassium silver cyanide Promecarb		
P068	60-34-4	Methyl hydrazine	P203	1646-88-4	Propanal, 2-methyl-2-(methyl-		
P064	624-83-9	Methyl isocyanate	F203	1040-00-4	sulfonyl)-, O-		
P069	75-86-5	2-Methyllactonitrile			[(methylamino)carbonyl] oxime		
P071	298-00-0	Methyl parathion	P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-		
P190	1129-41-5	Metolcarb	1070	110-00-3	[(methylamino)carbonyl]oxime		
P128	315-18-4	Mexacarbate	P101	107-12-0	Propanenitrile		
P072	86-88-4	alpha-Naphthylthiourea	P027	542-76-7	Propanenitrile, 3-chloro-		
P073	13463-39-3	Nickel carbonyl	P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-		
P073	13463-39-3	Nickel carbonyl Ni(CO) <sub>4</sub> , (T-4)-	P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)		
P074	557-19-7	Nickel cyanide	P017	598-31-2	2-Propanone, 1-bromo-		
P074	557-19-7	Nickel cyanide Ni(CN) <sub>2</sub>	P102	107-19-7	Propargyl alcohol		
P075		Nicotine, & salts	P003	107-02-8	2-Propenal		
	<sup>1</sup> 54-11-5		P005	107-18-6	2-Propen-1-ol		
P076	10102-43-9 100-01-6	Nitric oxide	P067	75-55-8	1,2-Propylenimine		
P077 P078	10102-44-0	p-Nitroaniline Nitrogen dioxide	P102	107-19-7	2-Propyn-1-ol		
P076	10102-44-0	Nitrogen oxide NO	P008	504-24-5	4-Pyridinamine		
P078	10102-43-9	Nitrogen oxide NO <sub>2</sub>	P075	<sup>1</sup> 54-11-5	Pyridine, 3-(1-methyl-2-		
					pyrrolidinyl)-, (S)-, & salts		
P081 P082	55-63-0	Nitroglycerine (R)	P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol,		
P082 P084	62-75-9 4549-40-0	N-Nitrosodimethylamine			1,2,3,3a,8,8a-hexahydro-		
P084 P085	152-16-9	N-Nitrosomethylvinylamine Octamethylpyrophosphoramide			1,3a,8-trimethyl-,		
P087	20816-12-0	Osmium oxide OsO <sub>4</sub> , (T-4)-			methylcarbamate (ester), (3aS-cis)-		
P087			P114	12039-52-0	Selenious acid, dithallium(1+) salt		
P087 P088	20816-12-0 145-73-3	Osmium tetroxide 7-Oxabicyclo[2.2.1]heptane-2,3-dicarbox-	P103	630-10-4	Selenourea		
P088	143-73-3	ylic acid	P104	506-64-9	Silver cyanide		
P194	23135-22-0	Oxamyl	P104	506-64-9	Silver cyanide Ag(CN)		
P089	56-38-2	Parathion	P105	26628-22-8	Sodium azide		
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-	P106	143-33-9	Sodium cyanide		
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-	P106	143-33-9	Sodium cyanide Na(CN)		
1 120	313 10 4	dimethyl-, methylcarbamate (ester)	P108	<sup>1</sup> 57-24-9	Strychnidin-10-one, & salts		
P199	2032-65-7	Phenol, (3,5-dimethyl-4-	P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-		
	2002 00 /	(methylthio)-, methylcarbamate	P108	<sup>1</sup> 57-24-9	Strychnine, & salts		
P048	51-28-5	Phenol, 2,4-dinitro-	P115	7446-18-6	Sulfuric acid, dithallium(1+) salt		
P047	<sup>1</sup> 534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts	P109	3689-24-5	Tetraethyldithiopyrophosphate		
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carba-	P110	78-00-2	Tetraethyl lead		
		mate	P111	107-49-3	Tetraethyl pyrophosphate		
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-,	P112	509-14-8	Tetranitromethane (R)		
		methyl carbamate	P062	757-58-4	Tetraphosphoric acid, hexaethyl ester		
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	P113	1314-32-5	Thallic oxide		
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)	P113	1314-32-5	Thallium oxide Tl <sub>2</sub> O <sub>3</sub>		
P092	62-38-4	Phenylmercury acetate	P114	12039-52-0	Thallium(I) selenite		
P093	103-85-5	Phenylthiourea	P115	7446-18-6	Thallium(I) sulfate		
P094	298-02-2	Phorate	P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester		
P095	75-44-5	Phosgene	P045	39196-18-4	Thiofanox		
P096	7803-51-2	Phosphine	P049	541-53-7	Thioimidodicarbonic diamide		
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester	D014	100.00.5	$[(H_2N)C(S)]_2NH$		
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-	P014	108-98-5	Thiophenol		
		(ethylthio)ethyl] ester	P116	79-19-6	Thiosemicarbazide		
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-	P026	5344-82-1	Thiourea, (2-chlorophenyl)-		
		[(ethylthio)methyl] ester	P072	86-88-4	Thiourea, 1-naphthalenyl-		
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-	P093	103-85-5	Thiourea, phenyl-		
- · · ·		[2-(methylamino)-2-oxoethyl] ester	P185	26419-73-8	Tirpate		
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl)	P123	8001-35-2	Toxaphene Triableromethanethicl		
<b>D</b> 000	# C 20 5	ester	P118	75-70-7 7803-55-6	Trichloromethanethiol Vanadic acid, ammonium salt		
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-	P119 P120	/803-55-6 1314-62-1			
D0.40	207.07.2	nitrophenyl) ester			Vanadium oxide V <sub>2</sub> O <sub>5</sub>		
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyr-	P120 P084	1314-62-1 4549-40-0	Vanadium pentoxide Vinylamine, N-methyl-N-nitroso-		
		azinyl ester	1004	<del>1317-10-0</del>	vinyianine, iv-memyi-iv-muoso-		

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### **Dangerous Waste Regulations**

The "P" was	stes and their co	rresponding Dangerous Waste Numbers	Numerical I	ist	
are:	stes and then co	rresponding Dangerous Waste Numbers	Dangerous	Chemical	
Alphabetical	List		Waste No.	Abstracts No.	Substance
Dangerous	Chemical		P031	460-19-5	Cyanogen
Waste No.	Abstracts No.	Substance	P031	460-19-5	Ethanedinitrile
P001	<sup>1</sup> 81-81-2	Warfarin, & salts, when present at concen-	P033	506-77-4	Cyanogen chloride
		trations greater than 0.3%	P033	506-77-4	Cyanogen chloride (CN)Cl
P205	137-30-4	Zinc,	P034	131-89-5	2-Cyclohexyl-4,6- dinitrophenol
		bis(dimethylcarbamodithioato-S,S')-	P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P121	557-21-1	Zinc cyanide	P036	696-28-6	Arsonous dichloride, phenyl-
P121	557-21-1	Zinc cyanide $Zn(CN)_2$	P036	696-28-6	Dichlorophenylarsine
P122	1314-84-7	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when present at con-	P037	60-57-1	Dieldrin
		centrations greater than 10% (R,T)	P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]
P205	137-30-4	Ziram			oxirene, 3,4,5,6,9,9-hexachloro-
					1a,2,2a,3,6,6a,7,7a-octahydro-,
Numerical L					(1aalpha,2beta,2aalpha,3beta,6beta,
Dangerous	Chemical	0.1.4			6aalpha,7beta, 7aalpha)-
Waste No.	Abstracts No.	Substance	P038	692-42-2	Arsine, diethyl-
D001	\1\01_01_2	211 1 D 2 1 11 2 (2	P038	692-42-2	Diethylarsine
P001	\1\81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-	P039	298-04-4	Disulfoton
		oxo-1-phenylbutyl)-, & salts, when present	P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-
P001	\1\81-81-2	at concentrations greater than 0.3% Warfarin, & salts, when present at concen-	70.40	207.07.2	(ethylthio)ethyl]ester
P001	\1\01-01-2		P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P002	591-08-2	trations greater than 0.3% Acetamide, -(aminothioxomethyl)-	P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyr-
P002 P002	591-08-2	1-Acetyl-2-thiourea	D0.41	211 45 5	azinyl ester
P002 P003	107-02-8	Acrolein	P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P003	107-02-8	2-Propenal	P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P004	309-00-2	Aldrin	P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methyl-
P004	309-00-2	1,4,5,8-Dimethanonaphthalene,	D042	51 42 4	amino)ethyl]-, (R)-
1 004	307-00-2	1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-	P042	51-43-4	Epinephrine Diisopropylfluorophosphate (DFP)
		hexahydro-, (1alpha,4alpha,4abeta,	P043 P043	55-91-4 55-91-4	Phosphorofluoridic acid, bis(1-methylethyl)
		5alpha,8alpha,8abeta)-	P043	33-91-4	ester
P005	107-18-6	Allyl alcohol	P044	60-51-5	Dimethoate
P005	107-18-6	2-Propen-1-ol	P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-
P006	20859-73-8	Aluminum phosphide (R,T)	FU44	00-31-3	[2-(methyl amino)-2-oxoethyl] ester
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol	P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-,
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-	1 043	39190-10-4	O-[(methylamino)carbonyl]oxime
P008	504-24-5	4-Aminopyridine	P045	39196-18-4	Thiofanox
P008	504-24-5	4-Pyridinamine	P046	122-09-8	Benzeneethanamine,alpha,alpha-dimethyl-
P009	131-74-8	Ammonium picrate (R)	P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)	P047	534-52-1	4,6-Dinitro-o-cresol, & salts
P010	7778-39-4	Arsenic acid H3 AsO4	P047	534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P011	1303-28-2	Arsenic oxide As2 O5	P048	51-28-5	2,4-Dinitrophenol
P011	1303-28-2	Arsenic pentoxide	P048	51-28-5	Phenol, 2,4-dinitro-
P012	1327-53-3	Arsenic oxide As2 O3	P049	541-53-7	Dithiobiuret
P012	1327-53-3	Arsenic trioxide	P049	541-53-7	Thioimidodicarbonic diamide[(H2
P013	542-62-1	Barium cyanide			N)C(S)]2 NH
P014	108-98-5	Benzenethiol	P050	115-29-7	Endosulfan
P014	108-98-5	Thiophenol	P050	115-29-7	6,9-Methano-2,4,3-benzodioxathie-
P015	7440-41-7	Beryllium powder			pin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-
P016	542-88-1	Dichloromethyl ether			hexahydro-, 3-oxide
P016	542-88-1	Methane, oxybis[chloro-	P051	\1\ 72-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene,
P017	598-31-2	Bromoacetone			3,4,5,6,9,9-
P017	598-31-2	2-Propanone, 1-bromo-			hexachloro-1a,2,2a,3,6,6a,7,7a-
P018	357-57-3	Brucine			octahydro-,(1aalpha,2beta,2abeta,
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-			3alpha,6alpha,6abeta,7beta,
P020	88-85-7	Dinoseb			7aalpha)-, & metabolites
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	P051	72-20-8	Endrin
P021	592-01-8	Calcium cyanide	P051	72-20-8	Endrin, & metabolites
P021	592-01-8	Calcium cyanide Ca(CN)2	P054	151-56-4	Aziridine
P022	75-15-0	Carbon disulfide	P054	151-56-4	Ethyleneimine
P023	107-20-0	Acetaldehyde, chloro-	P056	7782-41-4	Fluorine
P023	107-20-0	Chloroacetaldehyde	P057	640-19-7	Acetamide, 2-fluoro-
P024	106-47-8	Benzenamine, 4-chloro-	P057	640-19-7	Fluoroacetamide
P024	106-47-8	p-Chloroaniline	P058	62-74-8	Acetic acid, fluoro-, sodium salt
P026	5344-82-1	1-(o-Chlorophenyl)thiourea	P058	62-74-8	Fluoroacetic acid, sodium salt
P026	5344-82-1	Thiourea, (2-chlorophenyl)-	P059	76-44-8	Heptachlor
P027 P027	542-76-7 542-76-7	3-Chloropropionitrile	P059	76-44-8	4,7-Methano-1H-indene,1,4,5,6,7,8,8-hep-
P027 P028	542-76-7 100-44-7	Propanenitrile, 3-chloro- Benzene, (chloromethyl)-	D0.60	465 50 6	tachloro-3a,4,7,7a-tetrahydro-
P028 P028	100-44-7	Benzyl chloride	P060	465-73-6	1,4,5,8-Dimethanonaphthalene,
P028 P029	544-92-3	Copper cyanide			1,2,3,4,10,10-hexa-chloro-1,4,4a,5,
P029	544-92-3	Copper cyanide Cu(CN)			8,8a-hexahydro-,(1alpha,4alpha,
P030	577-74-5	Cyanides (soluble cyanide salts), not other-	P060	465-73-6	4abeta,5beta,8beta,8abeta)- Isodrin
1 030		wise specified	P060 P062	757-58-4	Hexaethyl tetraphosphate
		··	1 002	131-30-4	Treatemy) tetraphosphate

[Ch. 173-303 WAC—p. 222] (6/30/09)

Numerical I	ist		Numerical I	list	
Dangerous	Chemical		Dangerous	Chemical	
Waste No.	Abstracts No.	Substance	Waste No.	Abstracts No.	Substance
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	P102	107-19-7	Propargyl alcohol
P063	74-90-8	Hydrocyanic acid	P102	107-19-7	2-Propyn-1-ol
P063	74-90-8	Hydrogen cyanide	P103	630-10-4	Selenourea
P064	624-83-9	Methane, isocyanato-	P104	506-64-9	Silver cyanide
P064	624-83-9	Methyl isocyanate	P104	506-64-9	Silver cyanide Ag(CN)
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)	P105	26628-22-8	Sodium azide
P065	628-86-4	Mercury fulminate (R,T)	P106	143-33-9	Sodium cyanide
P066	16752-77-5	Ethanimidothioic acid, N-[[(methyl-	P106	143-33-9 \1\ 157-24-9	Sodium cyanide Na(CN)
P066	16752-77-5	amino)carbonyl]oxy]-, methyl ester Methomyl	P108 P108	\1\157-24-9	Strychnidin-10-one, & salts Strychnine, & salts
P067	75-55-8	Aziridine, 2-methyl-	P108 P109	3689-24-5	Tetraethyldithiopyrophosphate
P067	75-55-8	1,2-Propylenimine	P109	3689-24-5	Thiodiphosphoric acid,tetraethyl ester
P068	60-34-4	Hydrazine, methyl-	P110	78-00-2	Plumbane, tetraethyl-
P068	60-34-4	Methyl hydrazine	P110	78-00-2	Tetraethyl lead
P069	75-86-5	2-Methyllactonitrile	P111	107-49-3	Diphosphoric acid, tetraethylester
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	P111	107-49-3	Tetraethyl pyrophosphate
P070	116-06-3	Aldicarb	P112	509-14-8	Methane, tetranitro-(R)
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-	P112	509-14-8	Tetranitromethane (R)
		[(methylamino)carbonyl]oxime	P113	1314-32-5	Thallic oxide
P071	298-00-0	Methyl parathion	P113	1314-32-5	Thallium oxide Tl2 O3
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-	P114	12039-52-0	Selenious acid,dithallium(1+) salt
		nitrophenyl)ester	P114	12039-52-0	Tetraethyldithiopyrophosphate
P072	86-88-4	alpha-Naphthylthiourea	P115	7446-18-6	Thiodiphosphoric acid,tetraethyl ester
P072	86-88-4	Thiourea, 1-naphthalenyl-	P115	7446-18-6	Plumbane, tetraethyl-
P073	13463-39-3	Nickel carbonyl	P116	79-19-6	Tetraethyl lead
P073	13463-39-3	Nickel carbonyl Ni(CO)4, (T-4)-	P116	79-19-6	Thiosemicarbazide
P074	557-19-7	Nickel cyanide	P118	75-70-7	Methanethiol, trichloro-
P074 P075	557-19-7	Nickel cyanide Ni(CN)2	P118	75-70-7 7803-55-6	Trichloromethanethiol Ammonium vanadate
P075 P075	54-11-5 \1\ 54-11-5	Nicotine, & salts Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,	P119 P119	7803-55-6	Vanadic acid, ammonium salt
F0/3	\1\34-11-3	(S)-, & salts	P120	1314-62-1	Vanadium oxide V2O5
P076	10102-43-9	Nitric oxide	P120	1314-62-1	Vanadium pentoxide
P076	10102-43-9	Nitrogen oxide NO	P121	557-21-1	Zinc cyanide
P077	100-01-6	Benzenamine, 4-nitro-	P121	557-21-1	Zinc cyanide Zn(CN)2
P077	100-01-6	p-Nitroaniline	P122	1314-84-7	Zinc phosphide Zn3 P2, when present at
P078	10102-44-0	Nitrogen dioxide			concentrations greater than 10% (R,T)
P078	10102-44-0	Nitrogen oxide NO2	P123	8001-35-2	Toxaphene
P081	55-63-0	Nitroglycerine (R)	P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)			dimethyl-,methylcarbamate
P082	62-75-9	Methanamine, -methyl-N-nitroso-	P127	1563-66-2	Carbofuran
P082	62-75-9	N-Nitrosodimethylamine	P128	315-8-4	Mexacarbate
P084	4549-40-0	N-Nitrosomethylvinylamine	P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-,
P084	4549-40-0	Vinylamine, -methyl-N-nitroso-	7105	26410.72.0	methylcarbamate(ester)
P085	152-16-9	Diphosphoramide, octamethyl-	P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-
P085	152-16-9	Octamethylpyrophosphoramide			dimethyl-, O-[(methylamino)-car-
P087 P087	20816-12-0 20816-12-0	Osmium oxide OsO4, (T-4)- Osmium tetroxide	P185	26419-73-8	bonyl]oxime
P087 P088	145-73-3	Endothall	P188	57-64-7	Tirpate Benzoic acid, 2-hydroxy-,compd. with
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarbox-	1 100	37-04-7	(3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-
1 000	143 73 3	vlic acid			trimethylpyrrolo[2,3-b]indol-5-yl methyl-
P089	56-38-2	Parathion			carbamate ester (1:1)
P089	56-38-2	Phosphorothioic acid, O.O-diethyl O-(4-	P188	57-64-7	Physostigmine salicylate
		nitrophenyl)ester	P189	55285-14-8	Carbamic acid,[(dibutylamino)-
P092	62-38-4	Mercury, (acetato-O)phenyl-			thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-
P092	62-38-4	Phenylmercury acetate			benzofuranyl ester
P093	103-85-5	Phenylthiourea	P189	55285-14-8	Carbosulfan
P093	103-85-5	Thiourea, phenyl-	P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl
P094	298-02-2	Phorate			ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-	P190	1129-41-5	Metolcarb
		[(ethylthio)methyl]ester	P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-
P095	75-44-5	Carbonic dichloride			amino)carbonyl]-5-methyl-1H-pyrazol-3-yl
P095	75-44-5	Phosgene	D101	614.64.4	ester
P096 P096	7803-51-2 7803-51-2	Hydrogen phosphide Phosphine	P191 P192	644-64-4	Dimetilan Carbamic acid, dimethyl-, 3-methyl-1-(1-
			P192	119-38-0	
P097 P097	52-85-7 52-85-7	Famphur Phosphorothioic acid, O-[4-[(dimethyl-	P192	119-38-0	methylethyl)-1H-pyrazol-5-yl ester Isolan
FU9/	34-63-1	amino)sulfonyl]phenyl]O,O-dimethyl ester	P192 P194	23135-22-0	Ethanimidthioic acid, 2-(dimethylamino)-
P098	151-50-8	Potassium cyanide	1 1 27	43133-44-V	N-[[(methylamino)carbonyl]oxy]-2-oxo-,
P098	151-50-8	Potassium cyanide K(CN)			methylester
P099	506-61-6	Argentate(1-), bis(cyano-C)-,potassium	P194	23135-22-0	Oxamyl
P099	506-61-6	Potassium silver cyanide	P196	15339-36-3	Manganese, bis (dimethylcarbamodithioato-
P101	107-12-0	Ethyl cyanide			S,S')-,
P101	107-12-0	Propanenitrile	P196	15339-36-3	Manganesedimethyldithiocarbamate
					- -

(6/30/09) [Ch. 173-303 WAC—p. 223]

## **Dangerous Waste Regulations**

Numerical Li					
Numer icar L	ist		U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-
Dangerous	Chemical				dione, 6-amino-8-[[(aminocar-
Waste No.	Abstracts No.	Substance			bonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahy-
P197	17702-57-7	Formparanate			dro-8a-methoxy-5-methyl-, [1aS-(1aalpha,
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-			8beta,8aalpha,8balpha)]-
		methyl-4-[[(methylamino)car-	U280	101-27-9	Barban
		bonyl]oxy]phenyl]-	U278	22781-23-3	Bendiocarb
P198	23422-53-9	Formetanate hydrochloride	U364	22961-82-6	Bendiocarb phenol
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-	U271	17804-35-2	Benomyl
		[[(methylamino)-carbonyl]oxy]phenyl]-	U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-
P199	2032-65-7	monohydrochloride Methiocarb	U016	225-51-4	methyl-
P199 P199	2032-65-7	Phenol, (3,5-dimethyl-4-	U016 U017	98-87-3	Benz[c]acridine Benzal chloride
1 199	2032-03-7	(methylthio)-,methylcarbamate	U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, meth-	0172	23730 30 3	2-propynyl)-
	2031 37 0	ylcarbamate	U018	56-55-3	Benz[a]anthracene
P201	2631-37-0	Promecarb	U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
P202	64-00-6	m-Cumenyl methylcarbamate	U012	62-53-3	Benzenamine (I,T)
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate	U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-
P202	64-00-6	Phenol, 3-(1-methylethyl)-,methyl carba-			dimethyl-
		mate	U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydro-
P203	1646-88-4	Aldicarb sulfone			chloride
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-,	U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenyl-
<b>D204</b>	·	O-[(methylamino)carbonyl]oxime	****	0.5.55	azo)-
P204	57-47-6	Physostigmine	U328	95-53-4	Benzenamine, 2-methyl-
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol,1,2,3,3a,8,8a-	U353	106-49-0	Benzenamine, 4-methyl-
		hexahydro-1,3a,8-	U158	101-14-4 636-21-5	Benzenamine, 4,4'-methylenebis[2-chloro-
		trimethyl-,methylcarbamate (ester),(3aS-cis)-	U222 U181	99-55-8	Benzenamine, 2-methyl-, hydrochloride Benzenamine, 2-methyl-5-nitro-
P205	137-30-4	Zinc, bis	U019	71-43-2	Benzene (I,T)
F 203	137-30-4	(dimethylcarbamodithioato-S,S')-,	U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-
P205	137-30-4	Ziram	0038	310-13-0	chlorophenyl)-alpha-hydroxy-, ethyl ester
			U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
FOOTNOTE:	1 CAS N	Number given for parent compound only.	U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloro-
			0000	300 03 3	ethyl)amino]-
	יין זיי	Chemical Products	U037	108-90-7	Benzene, chloro-
Comment:		ience of the regulated community, the primary	U221	25376-45-8	Benzenediamine, ar-methyl-
Comment.	hazardous prop	perties of these materials have been indicated (Toxicity), R (Reactivity), I (Ignitability) and	U028	117-81-7	1,2-Benzenedicarboxylic acid,bis(2-ethyl-hexyl) ester
	C (Corrosivity)	). Absence of a letter indicates that the com-	U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
		isted for toxicity. Wastes are first listed in	U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
	alphabetical or	der by substance and then listed again in	U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
Th - "II"		r by Dangerous Waste Number. rresponding Dangerous Waste Numbers	U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
	tes and their co	rresponding Dangerous waste Numbers	U070	95-50-1	Benzene, 1,2-dichloro-
are: Alphabetical	List		U071	541-73-1	Benzene, 1,3-dichloro-
Dangerous	Chemical		U072	106-46-7	Benzene, 1,4-dichloro-
Waste No.	Abstracts No.	Substance	U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethyli-
U394	30558-43-1	A2213			dene)bis[4-chloro-
U001	75-07-0	Acetaldehyde (I)	U017	98-87-3	Benzene, (dichloromethyl)-
U034	75-87-6	Acetaldehyde, trichloro-	U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-			(R,T)
	53-96-3	Acetamide, N-9H-fluoren-2-yl-	U239	1330-20-7	Benzene, dimethyl- (I,T)
U005			U201	108-46-3	1,3-Benzenediol
	<sup>1</sup> 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts			
		Acetic acid, (2,4-dichlorophenoxy)-, salts & esters	U127	118-74-1	Benzene, hexachloro-
U240 U112		& esters Acetic acid ethyl ester (I)	U127 U056	118-74-1 110-82-7	Benzene, hexahydro- (I)
U240 U112 U144	<sup>1</sup> 94-75-7 141-78-6 301-04-2	& esters Acetic acid ethyl ester (I) Acetic acid, lead(2+) salt	U127 U056 U220	118-74-1 110-82-7 108-88-3	Benzene, hexahydro- (I) Benzene, methyl-
U240 U112 U144 U214	<sup>1</sup> 94-75-7 141-78-6 301-04-2 563-68-8	& esters Acetic acid ethyl ester (I) Acetic acid, lead(2+) salt Acetic acid, thallium(1+) salt	U127 U056 U220 U105	118-74-1 110-82-7 108-88-3 121-14-2	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro-
U240 U112 U144 U214 See F027	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5	& esters Acetic acid ethyl ester (I) Acetic acid, lead(2+) salt Acetic acid, thallium(1+) salt Acetic acid, (2,4,5-trichlorophenoxy)-	U127 U056 U220 U105 U106	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro-
U240 U112 U144 U214 See F027 U002	<sup>1</sup> 94-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1	& esters Acetic acid ethyl ester (I) Acetic acid, lead(2+) salt Acetic acid, thallium(1+) salt Acetic acid, (2,4,5-trichlorophenoxy)- Acetone (I)	U127 U056 U220 U105 U106 U055	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I)
U240 U112 U144 U214 See F027 U002 U003	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8	& esters Acetic acid ethyl ester (I) Acetic acid, lead(2+) salt Acetic acid, thallium(1+) salt Acetic acid, (2,4,5-trichlorophenoxy)- Acetone (I) Acetonitrile (I,T)	U127 U056 U220 U105 U106 U055 U169	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro-
U240 U112 U144 U214 See F027 U002 U003 U004	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2	& esters  Acetic acid ethyl ester (I)  Acetic acid, lead(2+) salt  Acetic acid, thallium(1+) salt  Acetic acid, (2,4,5-trichlorophenoxy)-  Acetone (I)  Acetonitrile (I,T)  Acetophenone	U127 U056 U220 U105 U106 U055 U169 U183	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro-
U240 U112 U144 U214 See F027 U002 U003 U004 U005	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3	& esters Acetic acid ethyl ester (I) Acetic acid, lead(2+) salt Acetic acid, thallium(1+) salt Acetic acid, (2,4,5-trichlorophenoxy)- Acetone (I) Acetonitrile (I,T) Acetophenone 2-Acetylaminofluorene	U127 U056 U220 U105 U106 U055 U169	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro- Benzene, pentachloro-
U240 U112 U144 U214 See F027 U002 U003 U004 U005 U006	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5	& esters  Acetic acid ethyl ester (I)  Acetic acid, lead(2+) salt  Acetic acid, thallium(1+) salt  Acetic acid, (2,4,5-trichlorophenoxy)-  Acetone (I)  Acetonitrile (I,T)  Acetophenone  2-Acetylaminofluorene  Acetyl chloride (C,R,T)	U127 U056 U220 U105 U106 U055 U169 U183 U185	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5 82-68-8	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro-
U240  U112  U144  U214  See F027  U002  U003  U004  U005  U006  U007	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5 79-06-1	& esters Acetic acid ethyl ester (I) Acetic acid, lead(2+) salt Acetic acid, thallium(1+) salt Acetic acid, (2,4,5-trichlorophenoxy)- Acetone (I) Acetonitrile (I,T) Acetophenone 2-Acetylaminofluorene Acetyl chloride (C,R,T) Acrylamide	U127 U056 U220 U105 U106 U055 U169 U183 U185 U020	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5 82-68-8 98-09-9	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro- Benzene, pentachloronitro- Benzenesulfonic acid chloride (C,R)
See F027 U002 U003 U004 U005 U006 U007 U008 U009	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5 79-06-1 79-10-7 107-13-1	& esters Acetic acid ethyl ester (I) Acetic acid, lead(2+) salt Acetic acid, thallium(1+) salt Acetic acid, (2,4,5-trichlorophenoxy)- Acetonie (I) Acetonitrile (I,T) Acetophenone 2-Acetylaminofluorene Acetyl chloride (C,R,T) Acrylamide Acrylic acid (I) Acrylonitrile	U127 U056 U220 U105 U106 U055 U169 U183 U185 U020 U020	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5 82-68-8 98-09-9 98-09-9	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro- Benzene, pentachloroitro- Benzenesulfonic acid chloride (C,R) Benzenesulfonyl chloride (C,R) Benzene, 1,2,4,5-tetrachloro- Benzene, 1,1'-(2,2,2-trichloroethyli-
U240  U112  U144  U214  See F027  U002  U003  U004  U005  U006  U007  U008  U009  U011	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5 79-06-1 79-10-7 107-13-1 61-82-5	& esters  Acetic acid ethyl ester (I)  Acetic acid, lead(2+) salt  Acetic acid, thallium(1+) salt  Acetic acid, (2,4,5-trichlorophenoxy)-  Acetone (I)  Acetonitrile (I,T)  Acetophenone  2-Acetylaminofluorene  Acetyl chloride (C,R,T)  Acrylamide  Acrylonitrile  Amitrole	U127 U056 U220 U105 U106 U055 U169 U183 U185 U020 U020 U207 U061	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5 82-68-8 98-09-9 98-09-9 95-94-3 50-29-3	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro- Benzene, pentachloroitro- Benzenesulfonic acid chloride (C,R) Benzenesulfonyl chloride (C,R) Benzene, 1,2,4,5-tetrachloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U240  U112  U144  U214  See F027  U002  U003  U004  U005  U006  U007  U008  U009  U011  U012	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5 79-06-1 79-10-7 107-13-1 61-82-5 62-53-3	& esters  Acetic acid ethyl ester (I)  Acetic acid, lead(2+) salt  Acetic acid, thallium(1+) salt  Acetic acid, (2,4,5-trichlorophenoxy)-  Acetone (I)  Acetonitrile (I,T)  Acetophenone  2-Acetylaminofluorene  Acetyl chloride (C,R,T)  Acrylamide  Acrylic acid (I)  Acrylonitrile  Amitrole  Aniline (I,T)	U127 U056 U220 U105 U106 U055 U169 U183 U185 U020 U020	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5 82-68-8 98-09-9 98-09-9 95-94-3	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro- Benzene, pentachloronitro- Benzenesulfonic acid chloride (C,R) Benzenesulfonyl chloride (C,R) Benzene, 1,2,4,5-tetrachloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U240  U112  U144  U214  See F027  U002  U003  U004  U005  U006  U007  U008  U009  U011  U012  U136	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5 79-06-1 79-10-7 107-13-1 61-82-5 62-53-3 75-60-5	& esters  Acetic acid ethyl ester (I)  Acetic acid, lead(2+) salt  Acetic acid, thallium(1+) salt  Acetic acid, (2,4,5-trichlorophenoxy)-  Acetone (I)  Acetonitrile (I,T)  Acetophenone  2-Acetylaminofluorene  Acetyl chloride (C,R,T)  Acrylamide  Acrylic acid (I)  Acrylonitrile  Amitrole  Aniline (I,T)  Arsinic acid, dimethyl-	U127 U056 U220 U105 U106 U055 U169 U183 U185 U020 U020 U207 U061	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5 82-68-8 98-09-9 98-09-9 95-94-3 50-29-3	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro- Benzene, pentachloro- Benzenesulfonic acid chloride (C,R) Benzenesulfonyl chloride (C,R) Benzene, 1,2,4,5-tetrachloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U240  U112  U144  U214  See F027  U002  U003  U004  U005  U006  U007  U008  U009  U011  U012  U136  U014	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5 79-06-1 79-10-7 107-13-1 61-82-5 62-53-3 75-60-5 492-80-8	& esters  Acetic acid ethyl ester (I)  Acetic acid, lead(2+) salt  Acetic acid, thallium(1+) salt  Acetic acid, (2,4,5-trichlorophenoxy)-  Acetone (I)  Acetonitrile (I,T)  Acetophenone  2-Acetylaminofluorene  Acetyl chloride (C,R,T)  Acrylamide  Acrylic acid (I)  Acrylonitrile  Amitrole  Aniline (I,T)  Arsinic acid, dimethyl-  Auramine	U127 U056 U220 U105 U106 U055 U169 U183 U185 U020 U020 U207 U061 U247	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5 82-68-8 98-09-9 98-09-9 95-94-3 50-29-3 72-43-5	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro- Benzene, pentachloronitro- Benzenesulfonic acid chloride (C,R) Benzenesulfonyl chloride (C,R) Benzene, 1,2,4,5-tetrachloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy- Benzene, (trichloromethyl)-
U240  U112  U144  U214  See F027  U002  U003  U004  U005  U006  U007  U008  U009  U011  U012	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5 79-06-1 79-10-7 107-13-1 61-82-5 62-53-3 75-60-5	& esters  Acetic acid ethyl ester (I)  Acetic acid, lead(2+) salt  Acetic acid, thallium(1+) salt  Acetic acid, (2,4,5-trichlorophenoxy)-  Acetone (I)  Acetonitrile (I,T)  Acetophenone  2-Acetylaminofluorene  Acetyl chloride (C,R,T)  Acrylamide  Acrylic acid (I)  Acrylonitrile  Amitrole  Aniline (I,T)  Arsinic acid, dimethyl-	U127 U056 U220 U105 U106 U055 U169 U183 U185 U020 U020 U207 U061 U247 U023 U223	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5 82-68-8 98-09-9 98-09-9 95-94-3 50-29-3 72-43-5 98-07-7 99-35-4	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro- Benzene, pentachloro- Benzenesulfonic acid chloride (C,R) Benzenesulfonyl chloride (C,R) Benzene, 1,2,4,5-tetrachloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy- Benzene, (trichloromethyl)- Benzene, 1,3,5-trinitro-
U240  U112 U144 U214 See F027 U002 U003 U004 U005 U006 U007 U008 U009 U011 U012 U136 U014	194-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5 79-06-1 79-10-7 107-13-1 61-82-5 62-53-3 75-60-5 492-80-8	& esters  Acetic acid ethyl ester (I)  Acetic acid, lead(2+) salt  Acetic acid, thallium(1+) salt  Acetic acid, (2,4,5-trichlorophenoxy)-  Acetone (I)  Acetonitrile (I,T)  Acetophenone  2-Acetylaminofluorene  Acetyl chloride (C,R,T)  Acrylamide  Acrylic acid (I)  Acrylonitrile  Amitrole  Aniline (I,T)  Arsinic acid, dimethyl-  Auramine	U127 U056 U220 U105 U106 U055 U169 U183 U185 U020 U020 U207 U061 U247	118-74-1 110-82-7 108-88-3 121-14-2 606-20-2 98-82-8 98-95-3 608-93-5 82-68-8 98-09-9 98-09-9 95-94-3 50-29-3 72-43-5	Benzene, hexahydro- (I) Benzene, methyl- Benzene, 1-methyl-2,4-dinitro- Benzene, 2-methyl-1,3-dinitro- Benzene, (1-methylethyl)- (I) Benzene, nitro- Benzene, pentachloro- Benzene, pentachloronitro- Benzenesulfonic acid chloride (C,R) Benzenesulfonyl chloride (C,R) Benzene, 1,2,4,5-tetrachloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy- Benzene, (trichloromethyl)-

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11270	22701 22 2	1.2 Danier Earrel 4 al 2.2 E al 1	11046	107.20.2	Chloromothol mothol d
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,	U046	107-30-2	Chloromethyl methyl ether
U364	22061 92 6	methyl carbamate	U047	91-58-7	beta-Chloronaphthalene
U364 U203	22961-82-6 94-59-7	1,3-Benzodioxol-4-ol, 2,2-dimethyl- 1,3-Benzodioxole, 5-(2-propenyl)-	U048 U049	95-57-8 3165-93-3	o-Chlorophenol 4-Chloro-o-toluidine,hydrochloride
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	U032	13765-19-0	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , calcium salt
U090 U367	94-58-6	1,3-Benzodioxole, 5-propyl-	U050	218-01-9	Chrysene
0307	1563-38-8	7-Benzofuranol,	U051	1210 77 2	Creosote
U064	189-55-9	2,3-dihydro-2,2-dimethyl-	U052	1319-77-3	Cresol (Cresylic acid)
		Benzo[rst]pentaphene	U053	4170-30-3	Crotonaldehyde
U248	<sup>1</sup> 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-	U055	98-82-8	Cumene (I)
		oxo-1-phenyl-butyl)-, & salts, when present	U246	506-68-3	Cyanogen bromide (CN)Br
11022	50-32-8	at concentrations of 0.3% or less	U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U022		Benzo[a]pyrene	U056	110-82-7	Cyclohexane (I)
U197	106-51-4	p-Benzoquinone	U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-,
U023	98-07-7	Benzotrichloride (C,R,T)			(1alpha,2alpha,3beta,4alpha,5alpha,
U085	1464-53-5	2,2'-Bioxirane	****	100 04 1	6beta)-
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine	U057	108-94-1	Cyclohexanone (I)
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-	U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexa-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dime-	*****	<b>50.10.0</b>	chloro-
11005	110.02.7	thoxy-	U058	50-18-0	Cyclophosphamide
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethyl- Bromoform	U240	<sup>1</sup> 94-75-7	2,4-D, salts & esters
U225	75-25-2		U059	20830-81-3	Daunomycin
U030	101-55-3	4-Bromophenyl phenyl ether	U060	72-54-8	DDD
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	U061	50-29-3	DDT
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-	U062	2303-16-4	Diallate
U031	71-36-3	1-Butanol (I)	U063	53-70-3	Dibenz[a,h]anthracene
U159	78-93-3	2-Butanone (I,T)	U064	189-55-9	Dibenzo[a,i]pyrene
U160	1338-23-4	2-Butanone, peroxide (R,T)	U066	96-12-8	1,2-Dibromo-3-chloropropane
U053	4170-30-3	2-Butenal	U069	84-74-2	Dibutyl phthalate
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)	U070	95-50-1	o-Dichlorobenzene
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihy-	U071	541-73-1	m-Dichlorobenzene
		droxy-2-(1-methoxyethyl)-3-methyl-1-	U072	106-46-7	p-Dichlorobenzene
		oxobutoxy]methyl]-2,3,5,7a-tetrahydro-	U073	91-94-1	3,3'-Dichlorobenzidine
		1H-pyrrolizin-1-ylester, [1S-	U074	764-41-0	1,4-Dichloro-2-butene (I,T)
****		[1alpha(Z),7(2S*,3R*), 7aalpha]]-	U075	75-71-8	Dichlorodifluoromethane
U031	71-36-3	n-Butyl alcohol (I)	U078	75-35-4	1,1-Dichloroethylene
U136	75-60-5	Cacodylic acid	U079	156-60-5	1,2-Dichloroethylene
U032	13765-19-0	Calcium chromate	U025	111-44-4	Dichloroethyl ether
U238	51-79-6	Carbamic acid, ethyl ester	U027	108-60-1	Dichloroisopropyl ether
U178	615-53-2	Carbamic acid, methylnitroso-,ethyl ester	U024	111-91-1	Dichloromethoxy ethane
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl,	U081	120-83-2	2,4-Dichlorophenol
		methyl ester	U082	87-65-0	2,6-Dichlorophenol
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl] -	U084	542-75-6	1,3-Dichloropropene
****		1H-benzimidazol-2-yl]-, methyl ester	U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-	U395	5952-26-1	Diethylene glycol, dicarbamate
****		chloro-2-butynyl ester	U108	123-91-1	1,4-Diethyleneoxide
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester	U028	117-81-7	Diethylhexyl phthalate
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (imino-	U086	1615-80-1	N,N'-Diethylhydrazine
		carbonothioyl)]bis-, dimethyl ester	U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U097	79-44-7	Carbamic chloride, dimethyl-	U088	84-66-2	Diethyl phthalate Diethylstilbesterol
U114	<sup>1</sup> 111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-,	U089	56-53-1	Diethylstilbesterol
		salts & esters	U090	94-58-6	Dihydrosafrole
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-	U091	119-90-4	3,3'-Dimethoxybenzidine
		(2,3-dichloro-2-	U092	124-40-3	Dimethylamine (I)
		propenyl) ester	U093	60-11-7	p-Dimethylaminoazobenzene
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-	U094	57-97-6	7,12-Dimethylbenz[a]anthracene
		(2,3,3-trichloro-2-propenyl) ester	U095	119-93-7	3,3'-Dimethylbenzidine
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenyl-	U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide
		methyl) ester			(R)
U279	63-25-2	Carbaryl	U097	79-44-7	Dimethylcarbamoyl chloride
U372	10605-21-7	Carbendazim	U098	57-14-7	1,1-Dimethylhydrazine
U367	1563-38-8	Carbofuran phenol	U099	540-73-8	1,2-Dimethylhydrazine
U215	6533-73-9	Carbonic acid, dithallium(1+) salt	U101	105-67-9	2,4-Dimethylphenol
U033	353-50-4	Carbonic difluoride	U102	131-11-3	Dimethyl phthalate
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)	U103	77-78-1	Dimethyl sulfate
U033	353-50-4	Carbon oxyfluoride (R,T)	U105	121-14-2	2,4-Dinitrotoluene
U211	56-23-5	Carbon tetrachloride	U106	606-20-2	2,6-Dinitrotoluene
U034	75-87-6	Chloral	U107	117-84-0	Di-n-octyl phthalate
U035	305-03-3	Chlorambucil	U108	123-91-1	1,4-Dioxane
U036	57-74-9	Chlordane, alpha & gammaisomers	U109	122-66-7	1,2-Dioxane 1,2-Diphenylhydrazine
U026	494-03-1	Chlornaphazin	U110	142-84-7	Dipropylamine (I)
U037	108-90-7	Chlorobenzene	U111	621-64-7	Di-n-propylnitrosamine
U038	510-15-6	Chlorobenzilate	U041	106-89-8	Epichlorohydrin
U039	59-50-7	p-Chloro-m-cresol	U041 U001	75-07-0	Ethanal (I)
U042	110-75-8	2-Chloroethyl vinyl ether	U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U044	67-66-3	Chloroform	U404	121-44-8	Ethanamine, N,N-diethyl-
			0704	121-44-0	Difficulty 11,11-dictily 1-

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## **Dangerous Waste Regulations**

U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-	U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-(R)
		thienylmethyl)-	U116	96-45-7	2-Ímidazolidinethione
U067	106-93-4	Ethane, 1,2-dibromo-	U137	193-39-5	Indeno[1,2,3-cd]pyrene
U076	75-34-3	Ethane, 1,1-dichloro-	U190	85-44-9	1,3-Isobenzofurandione
U077	107-06-2	Ethane, 1,2-dichloro-	U140	78-83-1	Isobutyl alcohol (I,T)
U131	67-72-1	Ethane, hexachloro-	U141	120-58-1	Isosafrole
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-	U142	143-50-0	Kepone
		chloro-	U143	303-34-4	Lasiocarpine
U117	60-29-7	Ethane, 1,1'-oxybis-(I)	U144	301-04-2	Lead acetate
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-	U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U184	76-01-7	Ethane, pentachloro-	U145	7446-27-7	Lead phosphate
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-	U146	1335-32-6	Lead subacetate
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-	U129	58-89-9	Lindane
U218	62-55-5	Ethanethioamide	U163	70-25-7	MNNG
U226	71-55-6	Ethane, 1,1,1-trichloro-	U147	108-31-6	Maleic anhydride
U227	79-00-5	Ethane, 1,1,2-trichloro-	U148	123-33-1	Maleic hydrazide
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thio-	U149	109-77-3	Malononitrile
		bis[(methylimino) carbonyloxy]]bis-,	U150	148-82-3	Melphalan
		dimethyl ester	U151	7439-97-6	Mercury
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino) -	U152	126-98-7	Methacrylonitrile (I, T)
		N-hydroxy-2-oxo-, methyl ester	U092	124-40-3	Methanamine, N-methyl- (I)
U359	110-80-5	Ethanol, 2-ethoxy-	U029	74-83-9	Methane, bromo-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-	U045	74-87-3	Methane, chloro- (I, T)
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate	U046	107-30-2	Methane, chloromethoxy-
U004	98-86-2	Ethanone, 1-phenyl-	U068	74-95-3	Methane, dibromo-
U043	75-01-4	Ethene, chloro-	U080	75-09-2	Methane, dichloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-	U075	75-71-8	Methane, dichlorodifluoro-
U078	75-35-4	Ethene, 1,1-dichloro-	U138	74-88-4	Methane, iodo-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-	U119	62-50-0	Methanesulfonic acid, ethyl ester
U210	127-18-4	Ethene, tetrachloro-	U211	56-23-5	Methane, tetrachloro-
U228	79-01-6	Ethene, trichloro-	U153	74-93-1	Methanethiol (I, T)
U112	141-78-6	Ethyl acetate (I)	U225	75-25-2	Methane, tribromo-
U113	140-88-5	Ethyl acrylate (I)	U044	67-66-3	Methane, trichloro-
U238	51-79-6	Ethyl carbamate (urethane)	U121	75-69-4	Methane, trichlorofluoro-
U117	60-29-7	Ethyl ether (I)	U036	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-
U114	<sup>1</sup> 111-54-6	Ethylenebisdithiocarbamic acid,salts &	11154	(7.5(.1	octachloro-2,3,3a,4,7,7a-hexahydro-
11077	106.02.4	esters	U154	67-56-1	Methanol (I)
U067	106-93-4	Ethylene dibromide	U155	91-80-5	Methapyrilene
U077	107-06-2	Ethylene dichloride	U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-
U359 U115	110-80-5	Ethylene glycol monoethyl ether			2-one,1,1a,3,3a,4,5,5,5a,5b,6-decachlo-rooctahydro-
U116	75-21-8 96-45-7	Ethylene oxide (I,T) Ethylenethiourea	U247	72-43-5	Methoxychlor
U076	75-34-3	Ethylidene dichloride	U154	67-56-1	Methyl alcohol (I)
U118	97-63-2	Ethyl methacrylate	U029	74-83-9	Methyl bromide
U119	62-50-0	Ethyl methanesulfonate	U186	504-60-9	1-Methylbutadiene (I)
U120	206-44-0	Fluoranthene	U045	74-87-3	Methyl chloride (I,T)
U122	50-00-0	Formaldehyde	U156	79-22-1	Methyl chlorocarbonate (I,T)
U123	64-18-6	Formic acid (C,T)	U226	71-55-6	Methyl chloroform
U124	110-00-9	Furan (I)	U157	56-49-5	3-Methylcholanthrene
U125	98-01-1	2-Furancarboxaldehyde (I)	U158	101-14-4	4.4'-Methylenebis(2-chloroaniline)
U147	108-31-6	2,5-Furandione	U068	74-95-3	Methylene bromide
U213	109-99-9	Furan, tetrahydro-(I)	U080	75-09-2	Methylene chloride
U125	98-01-1	Furfural (I)	U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U124	110-00-9	Furfuran (I)	U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-	U138	74-88-4	Methyl iodide
		methyl-3-nitrosoureido)-, D-	U161	108-10-1	Methyl isobutyl ketone (I)
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitroso-	U162	80-62-6	Methyl methacrylate (I,T)
		amino)-carbonyl]amino]-	U161	108-10-1	4-Methyl-2-pentanone (I)
U126	765-34-4	Glycidylaldehyde	U164	56-04-2	Methylthiouracil
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-	U010	50-07-7	Mitomycin C
U127	118-74-1	Hexachlorobenzene	U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-
U128	87-68-3	Hexachlorobutadiene			amino-2,3,6-trideoxy)-alpha-L-lyxo-hexo-
U130	77-47-4	Hexachlorocyclopentadiene			pyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-
U131	67-72-1	Hexachloroethane			trihydroxy-1-methoxy-, (8S-cis)-
U132	70-30-4	Hexachlorophene	U167	134-32-7	1-Naphthalenamine
U243	1888-71-7	Hexachloropropene	U168	91-59-8	2-Naphthalenamine
U133	302-01-2	Hydrazine (R,T)	U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U086	1615-80-1	Hydrazine, 1,2-diethyl-	U165	91-20-3	Naphthalene
U098	57-14-7	Hydrazine, 1,1-dimethyl-	U047	91-58-7	Naphthalene, 2-chloro-
U099	540-73-8	Hydrazine, 1,2-dimethyl-	U166	130-15-4	1,4-Naphthalenedione
U109	122-66-7	Hydrazine, 1,2-diphenyl-	U236	72-57-1	2,7-Naphthalenedisulfonic acid,3,3'-[(3,3'-
U134	7664-39-3	Hydrofluoric acid (C,T)			dimethyl[1,1'-biphenyl]-4,4'-
U134	7664-39-3	Hydrogen fluoride (C,T)			diyl)bis(azo)bis[5-amino-4-hydroxy]-,
U135	7783-06-4	Hydrogen sulfide			tetrasodium salt
U135	7783-06-4	Hydrogen sulfide H <sub>2</sub> S	U279	63-25-2	1-Naphthalenol, methylcarbamate

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111.66	120 15 4	1.4 N. 1.4	11112	140.00.5	2.0 : :1 (1.1 (1.7)
U166	130-15-4	1,4-Naphthoquinone	U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U167	134-32-7	alpha-Naphthylamine	U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U168 U217	91-59-8	beta-Naphthylamine	U162	80-62-6	2-Propenoic acid, 2-methyl-,methyl ester
	10102-45-1	Nitric acid, thallium(1+) salt	11272	122 42 0	(I,T)
U169	98-95-3 100-02-7	Nitrobenzene (I,T)	U373	122-42-9	Propham
U170 U171	79-46-9	p-Nitrophenol 2-Nitropropane (I,T)	U411 U387	114-26-1 52888-80-9	Propoxur Prosulfocarb
U171	924-16-3	N-Nitrosodi-n-butylamine	U194		n-Propylamine (I,T)
U173	924-16-3 1116-54-7	N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine	U083	107-10-8 78-87-5	Propylene dichloride
U174			U148		
U174 U176	55-18-5 759-73-9	N-Nitrosodiethylamine	U148 U196	123-33-1 110-86-1	3,6-Pyridazinedione, 1,2-dihydro- Pyridine
U177	684-93-5	N-Nitroso-N-ethylurea N-Nitroso-N-methylurea	U190 U191	109-06-8	Pyridine, 2-methyl-
U178	615-53-2	N-Nitroso-N-methylurethane	U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-
U179	100-75-4	N-Nitrosopiperidine	0237	00-75-1	chloroethyl)amino]-
			U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-
U180 U181	930-55-2 99-55-8	N-Nitrosopyrrolidine 5-Nitro-o-toluidine	0104	30-04-2	methyl-2-thioxo-
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide	U180	930-55-2	Pyrrolidine, 1-nitroso-
U058	50-18-0		U200	50-55-5	
0038	30-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	U201	108-46-3	Reserpine Resorcinol
U115	75-21-8	Oxirane (I,T)	U202	<sup>1</sup> 81-07-2	Saccharin, & salts
U126	765-34-4	Oxirane (1,1) Oxiranecarboxyaldehyde	U202 U203	94-59-7	Safrole
U041	106-89-8	Oxirane, (chloromethyl)-			
U182		Paraldehyde	U204	7783-00-8	Selenious acid
U183	123-63-7	Pentachlorobenzene	U204	7783-00-8	Selenium dioxide
	608-93-5	Pentachloroethane	U205	7488-56-4	Selenium sulfide
U184	76-01-7		U205	7488-56-4	Selenium sulfide $SeS_2(R,T)$
U185	82-68-8	Pentachloronitrobenzene (PCNB)	U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	87-86-5	Pentachlorophenol	See F027	93-72-1	Silvex (2,4,5-TP)
U161	108-10-1	Pentanol, 4-methyl-	U206	18883-66-4	Streptozotocin
U186	504-60-9	1,3-Pentadiene (I)	U103	77-78-1	Sulfuric acid, dimethyl ester
U187	62-44-2	Phenacetin	U189	1314-80-3	Sulfur phosphide (R)
U188	108-95-2	Phenol	See F027	93-76-5	2,4,5-T
U048	95-57-8	Phenol, 2-chloro-	U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U039	59-50-7	Phenol, 4-chloro-3-methyl-	U208	630-20-6	1,1,1,2-Tetrachloroethane
U081	120-83-2	Phenol, 2,4-dichloro-	U209	79-34-5	1,1,2,2-Tetrachloroethane
U082	87-65-0	Phenol, 2,6-dichloro-	U210	127-18-4	Tetrachloroethylene
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-eth-	See F027	58-90-2	2,3,4,6-Tetrachlorophenol
11101	105 67 0	enediyl)bis-, (E)-	U213	109-99-9	Tetrahydrofuran (I)
U101	105-67-9	Phenol, 2,4-dimethyl-	U214	563-68-8	Thallium(I) acetate
U052	1319-77-3	Phenol, methyl-	U215	6533-73-9	Thallium(I) carbonate
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	U216	7791-12-0	Thallium(I) chloride
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarba-	U216	7791-12-0	Thallium chloride TlCl
*****	100 00 7	mate	U217	10102-45-1	Thallium(I) nitrate
U170	100-02-7	Phenol, 4-nitro-	U218	62-55-5	Thioacetamide
See F027	87-86-5	Phenol, pentachloro-	U410	59669-26-0	Thiodicarb
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-	U153	74-93-1	Thiomethanol (I,T)
See F027	95-95-4	Phenol, 2,4,5-trichloro-	U244	137-26-8	Thioperoxydicarbonic diamide
See F027	88-06-2	Phenol, 2,4,6-trichloro-			$[(H_2N)C(S)]_2S_2$ , tetramethyl-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloro-	U409	23564-05-8	Thiophanate-methyl
*** 4.5		ethyl)amino]-	U219	62-56-6	Thiourea
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)	U244	137-26-8	Thiram
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-	U220	108-88-3	Toluene
****		methyl ester	U221	25376-45-8	Toluenediamine
U189	1314-80-3	Phosphorus sulfide (R)	U223	26471-62-5	Toluene diisocyanate (R,T)
U190	85-44-9	Phthalic anhydride	U328	95-53-4	o-Toluidine
U191	109-06-8	2-Picoline	U353	106-49-0	p-Toluidine
U179	100-75-4	Piperidine, 1-nitroso-	U222	636-21-5	o-Toluidine hydrochloride
U192	23950-58-5	Pronamide	U389	2303-17-5	Triallate
U194	107-10-8	1-Propanamine (I,T)	U011	61-82-5	1H-1,2,4-Triazol-3-amine
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-	U227	71-55-6	1,1,1-Trichloroethane
U110	142-84-7	1-Propanamine, N-propyl- (I)	U227	79-00-5	1,1,2-Trichloroethane
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-	U228	79-01-6	Trichloroethylene
U083	78-87-5	Propane, 1,2-dichloro-	U121	75-69-4	Trichloromonofluoromethane
U149	109-77-3	Propanedinitrile	See F027	95-95-4	2,4,5-Trichlorophenol
U171	79-46-9	Propane, 2-nitro- (I,T)	See F027	88-06-2	2,4,6-Trichlorophenol
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-	U404	121-44-8	Triethylamine
U193	1120-71-4	1,3-Propane sultone	U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	1-Propanol, 2,3-dibromo-,phosphate (3:1)	U235	126-72-7	Tris(2,3-dibromopropyl)phosphate
U140	78-83-1	1-Propanol, 2-methyl- (I,T)	U236	72-57-1	Trypan blue
U002	67-64-1	2-Propanone (I)	U237	66-75-1	Uracil mustard
U007	79-06-1	2-Propenamide	U176	759-73-9	Urea, N-ethyl-N-nitroso-
U084	542-75-6	1-Propene, 1,3-dichloro-	U177	684-93-5	Urea, N-methyl-N-nitroso-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	U043	75-01-4	Vinyl chloride
U009	107-13-1	2-Propenenitrile	eU248	<sup>1</sup> 81-81-2	Warfarin, & salts, when present at concen-
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)		0. 0. 2	trations of 0.3% or less
U008	79-10-7	2-Propenoic acid (I)	U239	1330-20-7	Xylene (I)

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## **Dangerous Waste Regulations**

U200	50-55-5	Yohimban-16-carboxylic acid,11,17-dime-	Numerical I	List	
		thoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-,	Dangerous	Chemical	
		methyl ester,	Waste No.	Abstracts No.	Substance
***		(3beta,16beta,17alpha,18beta,20alpha)-	U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloro-
U249	1314-84-7	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when present at con-	11025	205 02 2	ethyl)amino]-
		centrations of 10% or less	U035 U036	305-03-3 57-74-9	Chlorambucil Chlordane, alpha & gamma isomers
Numer	ical List		U036	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-
Danger			0030	31-14-7	octachloro-2,3,3a,4,7,7a-hexahydro-
Waste 1		Substance	U037	108-90-7	Benzene, chloro-
U001	75-07-0	Acetaldehyde (I)	U037	108-90-7	Chlorobenzene
U001 U002	75-07-0 67-64-1	Ethanal (I) Acetone (I)	U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-
U002	67-64-1	2-Propanone (I)	*****	510.15.6	chlorophenyl)-alpha-hydroxy-, ethyl ester
U003	75-05-8	Acetonitrile (I,T)	U038	510-15-6	Chlorobenzilate
U004	98-86-2	Acetophenone	U039 U039	59-50-7 59-50-7	p-Chloro-m-cresol Phenol, 4-chloro-3-methyl-
U004	98-86-2	Ethanone, 1-phenyl-	U041	106-89-8	Epichlorohydrin
U005	53-96-3	Acetamide, -9H-fluoren-2-yl-	U041	106-89-8	Oxirane, (chloromethyl)-
U005	53-96-3	2-Acetylaminofluorene	U042	110-75-8	2-Chloroethyl vinyl ether
U006	75-36-5	Acetyl chloride (C,R,T)	U042	110-75-8	Ethene, (2-chloroethoxy)-
U007	79-06-1	Acrylamide	U043	75-01-4	Ethene, chloro-
U007	79-06-1	2-Propenamide	U043	75-01-4	Vinyl chloride
U008 U008	79-10-7 79-10-7	Acrylic acid (I) 2-Propenoic acid (I)	U044	67-66-3	Chloroform
U008	107-13-1	Acrylonitrile	U044	67-66-3	Methane, trichloro-
U009	107-13-1	2-Propenenitrile	U045	74-87-3	Methane, chloro- (I,T)
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-	U045 U046	74-87-3 107-30-2	Methyl chloride (I,T) Chloromethyl methyl ether
		dione, 6-amino-8-[[(aminocar-	U046	107-30-2	Methane, chloromethoxy-
		bonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahy-	U047	91-58-7	beta-Chloronaphthalene
		dro-8a-methoxy-5-methyl-, [1aS-	U047	91-58-7	Naphthalene, 2-chloro-
		(1aalpha,8beta,8aalpha,8balpha)]-	U048	95-57-8	o-Chlorophenol
U010	50-07-7	Mitomycin C	U048	95-57-8	Phenol, 2-chloro-
U011	61-82-5	Amitrole	U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydro-
U011 U012	61-82-5 62-53-3	1H-1,2,4-Triazol-3-amine			chloride
U012	62-53-3	Aniline (I,T) Benzenamine (I,T)	U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U014	492-80-8	Auramine (1,1)	U050	218-01-9	Chrysene
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-	U051 U052	1319-77-3	Creosote Cresol (Cresylic acid)
		dimethyl-	U052	1319-77-3	Phenol, methyl-
U015	115-02-6	Azaserine	U053	4170-30-3	2-Butenal
U015	115-02-6	L-Serine, diazoacetate(ester)	U053	4170-30-3	Crotonaldehyde
U016	225-51-4	Benz[c]acridine	U055	98-82-8	Benzene, (1-methylethyl)-(I)
U017	98-87-3	Benzal chloride	U055	98-82-8	Cumene (I)
U017 U018	98-87-3 56-55-3	Benzene, (dichloromethyl)-	U056	110-82-7	Benzene, hexahydro-(I)
U019	71-43-2	Benz[a]anthracene Benzenesulfonic acid chloride(C,R)	U056	110-82-7	Cyclohexane (I)
U020	98-09-9	Benzenesulfonyl chloride(C,R)	U057	108-94-1	Cyclohexanone (I)
U021	92-87-5	Benzidine	U058 U058	50-18-0 50-18-0	Cyclophosphamide 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine	0038	30-16-0	bis(2-chloroethyl)tetrahydro-, 2-oxide
U022	50-32-8	Benzo[a]pyrene	U059	20830-81-3	Daunomycin
U023	98-07-7	Benzene, (trichloromethyl)-	U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-
U023	98-07-7	Benzotrichloride (C,R,T)			amino-2,3,6-trideoxy)-alpha-L-lyxo-hexo-
U024 U024	111-91-1 111-91-1	Dichloromethoxy ethane			pyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-
0024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	***		trihydroxy-1-methoxy-, (8S-cis)-
U025	111-44-4	Dichloroethyl ether	U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethyli-
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-	U060	72-54-8	dene)bis[4-chloro- DDD
U026	494-03-1	Chlornaphazin	U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethyli-
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-	0001	30-27-3	dene)bis[4-chloro-
U027	108-60-1	Dichloroisopropyl ether	U061	50-29-3	DDT
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-	U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-
U028	117-81-7	1,2-Benzenedicarboxylic acid,bis(2-ethyl-			(2,3-dichloro-2-propenyl) ester
11020	117.01.7	hexyl) ester	U062	2303-16-4	Diallate
U028 U029	117-81-7 74-83-9	Diethylhexyl phthalate Methane, bromo-	U063	53-70-3	Dibenz[a,h]anthracene
U029	74-83-9	Methyl bromide	U064	189-55-9	Benzo[rst]pentaphene
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-	U064	189-55-9	Dibenzo[a,i]pyrene
U030	101-55-3	4-Bromophenyl phenyl ether	U066 U066	96-12-8 96-12-8	1,2-Dibromo-3-chloropropane
U031	71-36-3	1-Butanol (I)	U067	96-12-8 106-93-4	Propane, 1,2-dibromo-3-chloro- Ethane, 1,2-dibromo-
U031	71-36-3	n-Butyl alcohol (I)	U067	106-93-4	Ethylene dibromide
U032	13765-19-0	Calcium chromate	U068	74-95-3	Methane, dibromo-
U032	13765-19-0	Chromic acid H2 CrO4, calcium salt	U068	74-95-3	Methylene bromide
U033	353-50-4	Carbonic difluoride	U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U033 U034	353-50-4 75-87-6	Carbon oxyfluoride (R,T)	U069	84-74-2	Dibutyl phthalate
U034 U034	75-87-6 75-87-6	Acetaldehyde, trichloro- Chloral	U070	95-50-1	Benzene, 1,2-dichloro-
0054	75-07-0	Cinorui	U070	95-50-1	o-Dichlorobenzene

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Numerical L	ist		Numerical 1	List	
Dangerous	Chemical		Dangerous	Chemical	
Waste No.	Abstracts No.	Substance	Waste No.	Abstracts No.	Substance
U071	541-73-1	Benzene, 1,3-dichloro-	U105	121-14-2	2,4-Dinitrotoluene
U071	541-73-1	m-Dichlorobenzene	U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U072	106-46-7	Benzene, 1,4-dichloro-	U106	606-20-2	2,6-Dinitrotoluene
U072	106-46-7	p-Dichlorobenzene	U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	U107	117-84-0	Di-n-octyl phthalate
U073	91-94-1	3,3'-Dichlorobenzidine	U108	123-91-1	1,4-Diethyleneoxide
U074	764-41-0	2-Butene, 1,4-dichloro-(I,T)	U108	123-91-1	1,4-Dioxane
U074	764-41-0	1,4-Dichloro-2-butene (I,T)	U109	122-66-7	1,2-Diphenylhydrazine
U075	75-71-8	Dichlorodifluoromethane	U109	122-66-7	Hydrazine, 1,2-diphenyl-
U075	75-71-8	Methane, dichlorodifluoro-	U110	142-84-7	Dipropylamine (I)
U076	75-34-3	Ethane, 1,1-dichloro-	U110	142-84-7	1-Propanamine, N-propyl-(I)
U076	75-34-3	Ethylidene dichloride	U111	621-64-7	Di-n-propylnitrosamine
U077	107-06-2	Ethane, 1,2-dichloro-	U111	621-64-7	1-Propanamine, N-nitroso-N- propyl-
U077	107-06-2	Ethylene dichloride	U112	141-78-6	Acetic acid ethyl ester (I)
U078	75-35-4	1,1-Dichloroethylene	U112	141-78-6	Ethyl acetate (I)
U078	75-35-4	Ethene, 1,1-dichloro-	U113	140-88-5	Ethyl acrylate (I)
U079 U079	156-60-5	1,2-Dichloroethylene	U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U080	156-60-5 75-09-2	Ethene, 1,2-dichloro-, (E)- Methane, dichloro-	U114	\1\111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U080 U080	75-09-2 75-09-2	Methylene chloride	U114	\1\111-54-6	Ethylenebisdithiocarbamic acid, salts &
U080 U081	120-83-2	2,4-Dichlorophenol	0114	\1\111-34-0	esters
U081	120-83-2	Phenol, 2,4-dichloro-	U115	75-21-8	Ethylene oxide (I,T)
U082	87-65-0	2,6-Dichlorophenol	U115	75-21-8 75-21-8	Oxirane (I,T)
U082	87-65-0	Phenol, 2,6-dichloro-	U116	96-45-7	Ethylenethiourea
U083	78-87-5	Propane, 1,2-dichloro-	U116	96-45-7	2-Imidazolidinethione
U083	78-87-5	Propylene dichloride	U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U084	542-75-6	1,3-Dichloropropene	U117	60-29-7	Ethyl ether (I)
U084	542-75-6	1-Propene, 1,3-dichloro-	U118	97-63-2	Ethyl methacrylate
U085	1464-53-5	2,2'-Bioxirane	U118	97-63-2	2-Propenoic acid, 2-methyl-,ethyl ester
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)	U119	62-50-0	Ethyl methanesulfonate
U086	1615-80-1	N,N'-Diethylhydrazine	U119	62-50-0	Methanesulfonic acid, ethyl ester
U086	1615-80-1	Hydrazine, 1,2-diethyl-	U120	206-44-0	Fluoranthene
U087	3288-58-2	O,O-Diethyl S-methyldithiophosphate	U121	75-69-4	Methane, trichlorofluoro-
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-	U121	75-69-4	Trichloromonofluoromethane
		methyl ester	U122	50-00-0	Formaldehyde
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	U123	64-18-6	Formic acid (C,T)
U088	84-66-2	Diethyl phthalate	U124	110-00-9	Furan (I)
U089	56-53-1	Diethylstilbesterol	U124	110-00-9	Furfuran (I)
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-eth-	U125	98-01-1	2-Furancarboxaldehyde (I)
		enediyl)bis-, (E)-	U125	98-01-1	Furfural (I)
U090	94-58-6	1,3-Benzodioxole, 5-propyl-	U126	765-34-4	Glycidylaldehyde
U090	94-58-6	Dihydrosafrole	U126	765-34-4	Oxiranecarboxyaldehyde
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dime-	U127	118-74-1	Benzene, hexachloro-
11001	110.00.4	thoxy-	U127	118-74-1	Hexachlorobenzene
U091	119-90-4	3,3'-Dimethoxybenzidine	U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U092	124-40-3	Dimethylamine (I)	U128	87-68-3	Hexachlorobutadiene
U092 U093	124-40-3 60-11-7	Methanamine, -methyl-(I) Benzenamine, N,N-dimethyl-4-(phenyl-	U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,
0093	00-11-/	azo)-			(Tarpna,Zarpna,Soeta,4arpna, 5alpha,6beta)-
U093	60-11-7	p-Dimethylaminoazobenzene	U129	58-89-9	Lindane
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-	U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexa-
U094	57-97-6	7,12-Dimethylbenz[a]anthracene	0150	// 4/ 4	chloro-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-	U130	77-47-4	Hexachlorocyclopentadiene
0075	117 75 7	dimethyl-	U131	67-72-1	Ethane, hexachloro-
U095	119-93-7	3,3'-Dimethylbenzidine	U131	67-72-1	Hexachloroethane
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide	U132	70-30-4	Hexachlorophene
		(R)	U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-	U133	302-01-2	Hydrazine (R,T)
		(R)	U134	7664-39-3	Hydrofluoric acid (C,T)
U097	79-44-7	Carbamic chloride, dimethyl-	U134	7664-39-3	Hydrogen fluoride (C,T)
U097	79-44-7	Dimethylcarbamoyl chloride	U135	7783-06-4	Hydrogen sulfide
U098	57-14-7	1,1-Dimethylhydrazine	U135	7783-06-4	Hydrogen sulfide H2S
U098	57-14-7	Hydrazine, 1,1-dimethyl-	U136	75-60-5	Arsinic acid, dimethyl-
U099	540-73-8	1,2-Dimethylhydrazine	U136	75-60-5	Cacodylic acid
U099	540-73-8	Hydrazine, 1,2-dimethyl-	U137	193-39-5	Indeno[1,2,3-cd]pyrene
U101	105-67-9	2,4-Dimethylphenol	U138	74-88-4	Methane, iodo-
U101	105-67-9	Phenol, 2,4-dimethyl-	U138	74-88-4	Methyl iodide
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl	U140	78-83-1	Isobutyl alcohol (I,T)
****		ester	U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U102	131-11-3	Dimethyl phthalate	U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U103	77-78-1	Dimethyl sulfate	U141	120-58-1	Isosafrole
U103	77-78-1	Sulfuric acid, dimethyl ester	U142	143-50-0	Kepone
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-			

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## **Dangerous Waste Regulations**

Numerical I	List		Numerical 1	List	
Dangerous	Chemical		Dangerous	Chemical	
Waste No.	Abstracts No.	Substance	Waste No.	Abstracts No.	Substance
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-	U174	55-18-5	Ethanamine, -ethyl-N-nitroso-
		2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlo-	U174	55-18-5	N-Nitrosodiethylamine
		rooctahydro-	U176	759-73-9	N-Nitroso-N-ethylurea
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihy-	U176	759-73-9	Urea, N-ethyl-N-nitroso-
		droxy-2-(1-methoxyethyl)-3-methyl-1-	U177	684-93-5	N-Nitroso-N-methylurea
		oxobutoxy[methyl]-2,3,5,7a-tetrahydro-	U177	684-93-5	Urea, N-methyl-N-nitroso-
		1H-pyrrolizin-1-yl ester, [1S-	U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
		[1alpha(Z),7(2S*,3R*),7aalpha]]-	U178	615-53-2	N-Nitroso-N-methylurethane
U143	303-34-4	Lasiocarpine	U179	100-75-4	N-Nitrosopiperidine
U144	301-04-2	Acetic acid, lead(2+) salt	U179	100-75-4	Piperidine, 1-nitroso-
U144	301-04-2	Lead acetate	U180	930-55-2	N-Nitrosopyrrolidine
U145	7446-27-7	Lead phosphate	U180	930-55-2	Pyrrolidine, 1-nitroso-
U145	7446-27-7	Phosphoric acid, lead(2+)salt (2:3)	U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-	U181	99-55-8	5-Nitro-o-toluidine
U146	1335-32-6	Lead subacetate	U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U147	108-31-6	2,5-Furandione	U182	123-63-7	Paraldehyde
U147	108-31-6	Maleic anhydride	U183	608-93-5	Benzene, pentachloro-
U148	123-33-1	Maleic hydrazide	U183	608-93-5	Pentachlorobenzene
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-	U184	76-01-7	Ethane, pentachloro-
U149	109-77-3	Malononitrile	U184	76-01-7	Pentachloroethane
U149	109-77-3	Propanedinitrile	U185	82-68-8	Benzene, pentachloronitro-
U150	148-82-3	Melphalan	U185	82-68-8	Pentachloronitrobenzene (PCNB)
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloro-	U186	504-60-9	1-Methylbutadiene (I)
0130	140-02-3	ethyl)amino]-	U186	504-60-9	1,3-Pentadiene (I)
U151	7439-97-6	Mercury	U187	62-44-2	Acetamide, -(4-ethoxyphenyl)-
U152	126-98-7	Methacrylonitrile (I,T)	U187	62-44-2	Phenacetin
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)	U188	108-95-2	Phenol
U153	74-93-1	Methanethiol (I,T)	U189	1314-80-3	Phosphorus sulfide (R)
U153	74-93-1	Thiomethanol (I,T)	U189	1314-80-3	Sulfur phosphide (R)
U154	67-56-1	Methanol (I)	U190	85-44-9	1,3-Isobenzofurandione
U154	67-56-1	Methyl alcohol (I)	U190	85-44-9	Phthalic anhydride
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-	U191	109-06-8	2-Picoline
0133	71-00-3	pyridinyl-N'-(2-thienylmethyl)-	U191	109-06-8	Pyridine, 2-methyl-
U155	91-80-5	Methapyrilene	U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-
U156	79-22-1	Carbonochloridic acid, methylester (I,T)	0172	23730 30 3	2-propynyl)-
U156	79-22-1	Methyl chlorocarbonate (I,T)	U192	23950-58-5	Pronamide
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-	U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
		methyl-	U193	1120-71-4	1,3-Propane sultone
U157	56-49-5	3-Methylcholanthrene	U194	107-10-8	1-Propanamine (I,T)
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-	U194	107-10-8	n-Propylamine (I,T)
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)	U196	110-86-1	Pyridine
U159	78-93-3	2-Butanone (I,T)	U197	106-51-4	p-Benzoquinone
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)	U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U160	1338-23-4	2-Butanone, peroxide (R,T)	U200	50-55-5	Reserpine
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)	U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dime-
U161	108-10-1	Methyl isobutyl ketone (I)			thoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-,
U161	108-10-1	4-Methyl-2-pentanone (I)			methylester,(3beta,16beta,17alpha,
U161	108-10-1	Pentanol, 4-methyl-			18beta,20alpha)-
U162	80-62-6	Methyl methacrylate (I,T)	U201	108-46-3	1,3-Benzenediol
U162	80-62-6	2-Propenoic acid, 2-methyl-,methyl ester	U201	108-46-3	Resorcinol
		(I,T)	U202	181-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-diox-
U163	70-25-7	Guanidine, -methyl-N'-nitro-N-nitroso-			ide, & salts
U163	70-25-7	MNNG	U202	181-07-2	Saccharin, & salts
U164	56-04-2	Methylthiouracil	U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-	U203	94-59-7	Safrole
		methyl-2-thioxo-	U204	7783-00-8	Selenious acid
U165	91-20-3	Naphthalene	U204	7783-00-8	Selenium dioxide
U166	130-15-4	1,4-Naphthalenedione	U205	7488-56-4	Selenium sulfide
U166	130-15-4	1,4-Naphthoquinone	U205	7488-56-4	Selenium sulfide SeS2 (R,T)
U167	134-32-7	1-Naphthalenamine	U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-
U167	134-32-7	alpha-Naphthylamine			nitrosoureido)-, D-
U168	91-59-8	2-Naphthalenamine	U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitroso-
U168	91-59-8	beta-Naphthylamine			amino)-carbonyl]amino]-
U169	98-95-3	Benzene, nitro-	U206	18883-66-4	Streptozotocin
U169	98-95-3	Nitrobenzene (I,T)	U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U170	100-02-7	p-Nitrophenol	U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U170	100-02-7	Phenol, 4-nitro-	U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U171	79-46-9	2-Nitropropane (I,T)	U208	630-20-6	1,1,1,2-Tetrachloroethane
U171	79-46-9	Propane, 2-nitro- (I,T)	U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-	U209	79-34-5	1,1,2,2-Tetrachloroethane
U172	924-16-3	N-Nitrosodi-n-butylamine	U210	127-18-4	Ethene, tetrachloro-
U173	1116-54-7	Ethanol, 2,2'- (nitrosoimino)bis-	U210	127-18-4	Tetrachloroethylene
U173	1116-54-7	N-Nitrosodiethanolamine	U211	56-23-5	Carbon tetrachloride

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Numerical List			Numerical List		
Dangerous	Chemical		Dangerous	Chemical	
Waste No.	Abstracts No.	Substance	Waste No.	Abstracts No.	Substance
U211	56-23-5	Methane, tetrachloro-	U279	63-25-2	1-Naphthalenol, methylcarbamate
U213	109-99-9	Furan, tetrahydro-(I)	U280	101-27-9	Barban
U213	109-99-9	Tetrahydrofuran (I)	U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-
U214	563-68-8	Acetic acid, thallium(1+)salt			chloro-2-butynyl ester
U214	563-68-8	Thallium(I) acetate	U328	95-53-4	Benzenamine, 2-methyl-
U215	6533-73-9	Carbonic acid, dithallium(1+) salt	U328	95-53-4	o-Toluidine
U215	6533-73-9	Thallium(I) carbonate	U353	106-49-0	Benzenamine, 4-methyl-
U216	7791-12-0	Thallium(I) chloride	U353	106-49-0	p-Toluidine
U216	7791-12-0	Thallium chloride TlCl	U359	110-80-5	Ethanol, 2-ethoxy-
U217	10102-45-1	Nitric acid, thallium(1+) salt	U359	110-80-5	Ethylene glycol monoethylether
U217	10102-45-1	Thallium(I) nitrate	U364	22961-82-6	Bendiocarb phenol
U218	62-55-5	Ethanethioamide	U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,
U218	62-55-5	Thioacetamide	U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U219	62-56-6	Thiourea	U367	1563-38-8	Carbofuran phenol
U220	108-88-3	Benzene, methyl-	U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl,
U220	108-88-3	Toluene			methylester
U221	25376-45-8	Benzenediamine, ar-methyl-	U372	10605-21-7	Carbendazim
U221	25376-45-8	Toluenediamine	U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U222	636-21-5	Benzenamine, 2-methyl-,hydrochloride	U373	122-42-9	Propham
U222	636-21-5	o-Toluidine hydrochloride	U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenyl-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-(R,T)			methyl) ester
U223	26471-62-5	Toluene diisocyanate (R,T)	U387	52888-80-9	Prosulfocarb
U225	75-25-2	Bromoform	U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-
U225	75-25-2	Methane, tribromo-			(2,3,3-trichloro-2-propenyl) ester
U226	71-55-6	Ethane, 1,1,1-trichloro-	U389	2303-17-5	Triallate
U226	71-55-6	Methyl chloroform	U394	30558-43-1	A2213
U226	71-55-6	1,1,1-Trichloroethane	U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-
U227	79-00-5	Ethane, 1,1,2-trichloro-			N-hydroxy-2-oxo-, methyl ester
U227	79-00-5	1,1,2-Trichloroethane	U395	5952-26-1	Diethylene glycol, dicarbamate
U228	79-01-6	Ethene, trichloro-	U395	5952-26-1	Ethanol, 2,2'-oxybis-,dicarbamate
U228	79-01-6	Trichloroethylene	U404	121-44-8	Ethanamine, N,N-diethyl-
U234	99-35-4	Benzene, 1,3,5-trinitro-	U404	121-44-8	Triethylamine
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)	U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (imino-
U235	126-72-7	1-Propanol, 2,3-dibromo-,phosphate (3:1)			carbonothioyl)]bis-,dimethyl ester
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate	U409	23564-05-8	Thiophanate-methyl
U236	72-57-1	2,7-Naphthalenedisulfonicacid, 3,3'-[(3,3'-	U410	59669-26-0	Ethanimidothioic acid, N,N'-[thio-
		dimethyl[1,1'-biphenyl]-4,4'-			bis[(methylimino)carbonyloxy]]bis-,
		diyl)bis(azo)bis[5-amino-4-hydroxy]-,			dimethyl ester
		tetrasodium salt	U410	59669-26-0	Thiodicarb
U236	72-57-1	Trypan blue	U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarba-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-			mate
		chloroethyl)amino]-	U411	114-26-1	Propoxur
U237	66-75-1	Uracil mustard	See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U238	51-79-6	Carbamic acid, ethyl ester	See F027	87-86-5	Pentachlorophenol
U238	51-79-6	Ethyl carbamate (urethane)	See F027	87-86-5	Phenol, pentachloro-
U239	1330-20-7	Benzene, dimethyl- (I,T)	See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
U239	1330-20-7	Xylene (I)	See F027	95-95-4	Phenol, 2,4,5-trichloro-
U240	\1\94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts	See F027	88-06-2	Phenol, 2,4,6-trichloro-
		& esters	See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U240	\1\ 94-75-7	2,4-D, salts & esters	See F027	93-72-1	Silvex (2,4,5-TP)
U243	1888-71-7	Hexachloropropene	See F027	93-76-5	2,4,5-T
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U244	137-26-8	Thioperoxydicarbonic diamide	See F027	95-95-4	2,4,5-Trichlorophenol
		[(H2N)C(S)]2 S2, tetramethyl-	See F027	88-06-2	2,4,6-Trichlorophenol
U244	137-26-8	Thiram	FOOTNOTE	· 1CAS N	umber given for parent compound only.
U246	506-68-3	Cyanogen bromide (CN)Br	POOTNOTE	. CASIN	unioci given foi parent compound only.
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethyli-	[Statutory A	outhority. Chap	ters 70.105 and 70.105D RCW. 09-14-105
		dene)bis[4-methoxy-			3, filed 6/30/09, effective 7/31/09; 98-03-018
U247	72-43-5	Methoxychlor			3, filed 1/12/98, effective 2/12/98; 95-22-008
U248	\1\81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-			3, filed 10/19/95, effective 11/19/95; 94-01-
		oxo-1-phenyl-butyl)-, & salts, when present		// 0	
		at concentrations of 0.3% or less	,	// 0	9903, filed 12/8/93, effective 1/8/94. Statutory
U248	\1\81-81-2	Warfarin, & salts, when present at concen-			and 70.105D RCW, 40 CFR Part 271.3 and
		trations of 0.3% or less			1). 91-07-005 (Order 90-42), § 173-303-9903,
U249	1314-84-7	Zinc phosphide Zn3 P2, when present at			Statutory Authority: Chapter 70.105 RCW.
		concentrations of 10% or less			73-303-9903, filed 1/4/89; 86-12-057 (Order
U271	17804-35-2	Benomyl	DE-85-10),	§ 173-303-9903,	filed 6/3/86; 84-09-088 (Order DE 83-36), §
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-	173-303-990	3, filed 4/18/84. S	statutory Authority: Chapter 70.105 RCW and
		1H-benzimidazol-2-yl]-, methylester			(Order DE 81-33), § 173-303-9903, filed
U278	22781-23-3	Bendiocarb	2/10/82.]		, , , , , , , , , , , , , , , , , , , ,
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,			
		methyl carbamate	Revise	r's note: The bra	ackets and enclosed material in the text of the
U279	63-25-2	Carbaryl			copy filed by the agency.
			above seemon	. Securiou in the t	top, med of the agency.

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he followir PA used fo is section:	73-303-9904 Dangerous waste sources list.  ng Hazard Codes are used to indicate the basis or listing the classes or types of wastes listed in	F004	The following spent nonhalogenat vents: Cresols and cresylic acid, n zene; all spent solvent mixtures/bl taining, before use, a total of ten p more (by volume) of one or more
	Vaste (C) aste (R) aracteristic Waste (E) rdous Waste (H)	F005	above nonhalogenated solvents or vents listed in F001, F002, and F00 still bottoms from the recovery of the solvents and spent solvent mixture. The following spent nonhalogenat vents: Toluene, methyl ethyl ketor
	DANGEROUS WASTE SOURCES LIST		disulfide, isobutanol, pyridine, ber
1)			ethoxyethanol, and 2-nitropropane solvent mixtures/blends containing
Dangerous Waste No.	Sources		use, a total of ten percent or more ume) of one or more of the above n nated solvents or those solvents lis
	Nonspecific Sources		F001, F002, or F004; and still bott
Generic:	rouspecific Sources		the recovery of these spent solvent
7001	The following spent halogenated solvents	F00 <i>C</i>	spent solvent mixtures. (I,T)
	used in degreasing: Tetrachloroethylene, tri-	F006	Wastewater treatment sludges from
	chloroethylene, methylene chloride, 1,1,1-		plating operations except from the processes: (1) Sulfuric acid anodiz
	trichloroethane, carbon tetrachloride, and		aluminum; (2) tin plating on carbon
	chlorinated fluorocarbons; all spent solvent		zinc plating (segregated basis) on o
	mixtures/blends used in degreasing containing, before use, a total of ten percent or more		steel; (4) aluminum or zinc-alumir
	(by volume) of one or more of the above		ing on carbon steel; (5) cleaning/st
	halogenated solvents or those solvents listed		associated with tin, zinc, and alum
	in F002, F004, and F005; and still bottoms		ing on carbon steel; and (6) chemic
	from the recovery of these spent solvents and	F00 <b>5</b>	and milling of aluminum. (T)
	spent solvent mixtures. (T)	F007	Spent cyanide plating bath solution
7002	The following spent halogenated solvents:	E000	electroplating operations. (R,T)
	Tetrachloroethylene, methylene chloride, tri-	F008	Plating bath residues from the bott plating baths from electroplating o
	chloroethylene, 1,1,1-trichloroethane, chlo-		where cyanides are used in the pro
	robenzene, 1,1,2-trichloro-1,2,2-trifluoro- ethane, ortho-dichlorobenzene, trichloroflu-		(R,T)
	oromethane and 1,1,2 trichloroethane; all	F009	Spent stripping and cleaning bath
	spent solvent mixtures/blends containing,		from electroplating operations who
	before use, a total of ten percent or more (by		nides are used in the process. (R,T
	volume) of one or more of the above haloge-	F010	Quenching bath residues from oil b
	nated solvents or those listed in F001, F004,		metal heat treating operations whe
	or F005; and still bottoms from the recovery	E011	nides are used in the process. (R,T
	of these spent solvents and spent solvent	F011	Spent cyanide solutions from salt l
2002	mixtures. (T)		cleaning from metal heat treating o (R,T)
7003	The following spent nonhalogenated sol-	F012	Quenching wastewater treatment s
	vents: Xylene, acetone, ethyl acetate, ethyl	1012	from metal heat-treating operation
	benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and metha-		cyanides are used in the process. (
	nol; all spent solvent mixtures/blends con-	F019	Wastewater treatment sludges from
	taining, before use, only the above spent		chemical conversion coating of alu
	nonhalogenated solvents; and all spent sol-		except from zirconium phosphatin
	vent mixtures/blends containing, before use,		minum can washing when such ph
	one or more of the above nonhalogenated		is an exclusive conversion coating
	solvents, and, a total of ten percent or more	F020	(T) Wastes (except wastewater and spe
	(by volume) of one or more of those solvents	Γυ20	Wastes (except wastewater and spe from hydrogen chloride purification
	listed in F001, F002, F004, and F005; and		the production or manufacturing u
	still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I)		reactant, chemical intermediate, or
	sorvents and spent sorvent innitiates. (1)		nent in a formulating process) of tr

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F021	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)  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.)	F027	etra-, penta-, or hexachlorobenzene under alkaline conditions. (See footnote 1, below.) (H) 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) Residues resulting from the incineration or
F022	(H) 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	F032	thermal treatment of soil contaminated with nonspecific sources wastes F020, F021, F022, F023, F026 and F027. (T) Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood pre-
F023	footnote 1, below.) (H) 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.)		serving 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 westerness from used processing
F024	(H) 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)	F034	ment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T) 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)
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)	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
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 t	F037	processes that use creosote and/or pentachlo- rophenol. (T) Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treat- ment of process wastewaters and oily cool- ing wastewaters from petroleum refineries.

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F038

F039

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)

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)

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) Wastewater treatment sludge from the pro-K006 duction 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

#### **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

oxide green pigments. (T)

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)

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<sup>\*(</sup>I,T) should be used to specify mixtures that are ignitable and contain toxic constituents.

K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene. (T)	K115	Heavy ends from the purification of toluene- diamine in the production of toluenediamine
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene. (T)	K116	via hydrogenation of dinitrotoluene. (T) Organic condensate from the solvent recov-
K026	Stripping still tails from the production of methyl ethyl pyridines. (T)	11110	ery column in the production of toluene diisocyanate via phosgenation of toluenedi-
K027	Centrifuge and distillation residues from toluene diisocyanate production. (R,T)	K117	amine. (T) Wastewater from the reactor vent gas scrub-
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloro-	K117	ber in the production of ethylene dibromide via bromination of ethene. (T)
K029	ethane. (T) Waste from the product steam stripper in the	K118	Spent adsorbent solids from purification of ethylene dibromide in the production of eth-
K095	production of 1,1,1-trichloroethane. (T) Distillation bottoms from the production of		ylene dibromide via bromination of ethene.
	1,1,1-trichloroethane. (T)	K136	(T) Still bottoms from the purification of ethyl-
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.		ene dibromide in the production of ethylene dibromide via bromination of ethene. (T)
K030	(T) Column bottoms or heavy ends from the	K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes,
	combined production of trichloroethylene and perchloroethylene. (T)		ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these func-
K083	Distillation bottoms from aniline production. (T)		tional groups. (This waste does not include still bottoms from the distillation of benzyl
K103	Process residues from aniline extraction	17170	chloride.) (T)
K104	from the production of aniline. (T) Combined wastewater streams generated	K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and
K085	from nitrobenzene/aniline production. (T) Distillation of fractionation column bottoms		hydrochloric acid recovery processes associated with the production of alpha-(or methyl-
K105	from the production of chlorobenzenes. (T) Separated aqueous stream from the reactor		) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds
12100	product washing step in the production of chlorobenzenes. (T)	K151	with mixtures of these functional groups. (T) Wastewater treatment sludges, excluding
K107	Column bottoms from product separation	KIJI	neutralization and biological sludges, gener-
	from the production of 1,1- dimethylhydrazine (UDMH) from		ated during the treatment of wastewaters from the production of alpha-(or methyl-)
K108	carboxylic acid hydrazines. (C,T) Condensed column overheads from product		chlorinated toluenes, ring-chlorinated tolu- enes, benzoyl chlorides, and compounds
	separation and condensed reactor vent gases from the production of 1,1-dimethylhydra-	K156	with mixtures of these functional groups. (T) Organic waste (including heavy ends, still
	zine (UDMH) from the carboxylic acid hydrazides. (I,T)	11100	bottoms, light ends, spent solvents, filtrates, and decantates) from the production of car-
K109	Spent filter cartridges from product purifica-		bamates and carbamoyl oximes. (This listing
	tion from the production of 1,1-dimethylhy-drazine (UDMH) from carboxylic acid		does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butyl-
K110	hydrazides. (T) Condensed column overheads from interme-	K157	carbamate.) (T) Wastewaters (including scrubber waters,
	diate separation from the production of 1,1- dimethylhydrazine (UDMH) from carbox-		condenser waters, washwaters, and separation waters) from the production of carba-
K111	ylic acid hydrazides. (T) Product washwaters from the production of		mates and carbamoyl oximes. (This listing does not apply to wastes generated from the
	dinitrotoluene via nitration of toluene. (C,T)		manufacture of 3-iodo-2-propynyl n-butyl-
K112	Reaction by-product water from the drying column in the production of toluenediamine	K158	carbamate.) (T) Bag house dusts and filter/separation solids
K113	via hydrogenation of dinitrotoluene. (T) Condensed liquid light ends from the purifi-		from the production of carbamates and carbamoyl oximes. (This listing does not apply
	cation of toluenediamine in the production of toluenediamine via hydrogenation of dinitro-		to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K114	toluene. (T) Vicinals from the purification of toluenedi-	K159	Organics from the treatment of thiocarbamate wastes. (T)
11111	amine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)		(1)
	via nyurogenation of unitrotolucite. (1)		

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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) K174

Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions:

- (i) They are disposed of in a hazardous waste or nonhazardous landfill licensed or permitted by the state or federal government;
- (ii) They are not otherwise placed on the land prior to final disposal; and
- (iii) The generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off site landfill. Respondents in any action brought to enforce the requirements of the Hazardous Waste Management Act or dangerous waste regulations must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the

landfill owner/operator, invoices document-

ing delivery of waste to landfill, etc.) that the

terms of the exclusion were met. (T) Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylenebased process. (T)

Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in subsection (3) of this section that are equal to or greater than the corresponding subsection (3) of this section levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are:

- (i) Disposed in a municipal solid waste landfill unit subject to the design criteria in 40 CFR 258.40;
- (ii) Disposed in a dangerous waste landfill unit subject to either WAC 173-303-665(2) or 40 CFR 265.301 (incorporated by reference at WAC 173-303-400 (3)(a));

- (iii) Disposed in other municipal solid waste landfill units that meet the design criteria in 40 CFR 258.40, WAC 173-303-665(2) or 40 CFR 265.301 (incorporated by reference at WAC 173-303-400 (3)(a)); or
- (iv) Treated in a combustion unit that is permitted under the Hazardous Waste Management Act and the dangerous waste regulations, or an on-site combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in subsection (2)(a) of this section.

Subsection (4) of this section describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as dangerous under WAC 173-303-090 (5) through (8), 173-303-100 (5) through (6), 173-303-9903, and 173-303-9904 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met. (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 leadbased 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 pro-

cess using graphite anodes in chlorine production. (T)

K106 Wastewater treatment sludge from the mercury cell process in chlorine production. (T) K176 Baghouse filters from the production of anti-

mony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide). (E)

K177 Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide). (T)

K178 Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite

process. (T)

### **Petroleum Refining:**

K048 Dissolved air flotation (DAF) float from the petroleum refining industry. (T)

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K175

[K181]

K049	Slop oil emulsion solids from the petroleum	K098	Untreated process wastewater from the pro-
	refining industry. (T)		duction of toxaphene. (T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry. (T)	K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the pro-
K051	API separator sludge from the petroleum		duction of 2,4,5-T. (T)
K052	refining industry. (T) Tank bottoms (leaded) from the petroleum	K043	2,6-Dichlorophenol waste from the production of 2,4-D. (T)
	refining industry. (T)	K099	Untreated wastewater from the production of
K169	Crude oil storage tank sediment from petro-		2,4-D. (T)
	leum refining operations. (T)	K123	Process wastewater (including supernates,
K170	Clarified slurry oil tank sediment and/or in-		filtrates, and wastewaters) from the produc-
	line filter/separation solids from petroleum		tion of ethylenebisdithiocarbamic acid and
K171	refining operations. (T) Spent hydrotreating catalyst from petroleum	K124	its salts. (T) Reactor vent scrubber water from the pro-
K1/1	refining operations, including guard beds	K124	duction of ethylenebisdithiocarbamic acid
	used to desulfurize feeds to other catalytic		and its salts. (C,T)
	reactors (this listing does not include inert	K125	Filtration, evaporation, and centrifugation
	support media). $(I,T)$		solids from the production of ethylenebisdi-
K172	Spent hydrorefining catalyst from petroleum		thiocarbamic acid and its salts. (T)
	refining operations, including guard beds	K126	Baghouse dust and floor sweepings in mill-
	used to desulfurize feeds to other catalytic		ing and packaging operations from the pro-
	reactors (this listing does not include inert		duction or formulation of ethylenebisdithio-
I	support media). (I,T)	IZ 1 2 1	carbamic acid and its salts. (T)
Iron and Sto K061	Emission control dust/sludge from the pri-	K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the produc-
Koor	mary production of steel in electric furnaces.		tion of methyl bromide. (C,T)
	(T)	K132	Spent absorbent and wastewater separator
K062	Spent pickle liquor generated by steel finish-		solids from the production of methyl bro-
	ing operations of facilities within the iron		mide. (T)
	and steel industry (NAICS codes 331111 and	Primary A	
	332111). (C,T)	K088	Spent potliners from primary aluminum
<b>Pesticides:</b>			1 (T)
	D 1 / 1/ / 1 1 /	0 1	reduction. (T)
K031	Byproduct salts generated in the production	Secondary	Lead:
K031	of MSMA and cacodylic acid. (T)	Secondary K069	Lead: Emission control dust/sludge from second-
	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the pro-	K069	Lead: Emission control dust/sludge from secondary lead smelting. (T)
K031 K032	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T)	•	Lead: Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching
K031	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlori-	K069	Lead: Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from second-
K031 K032	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T)	K069 K100	Lead: Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching
K031 K032	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexa-	K069 K100	Lead: Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated dur-
K031 K032 K033	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of	K069 K100 Veterinary	Lead:     Emission control dust/sludge from secondary lead smelting. (T)     Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)     Pharmaceuticals:     Wastewater treatment sludges generated during the production of veterinary pharmaceu-
K031 K032 K033 K034	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T)	K069 K100 Veterinary	Lead:     Emission control dust/sludge from secondary lead smelting. (T)     Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)     Pharmaceuticals:     Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic com-
K031 K032 K033	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlor-	K069 K100 <b>Veterinary</b> K084	Lead: Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K031 K032 K033 K034	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlor-	K069 K100 Veterinary	Lead: Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation
K031 K032 K033 K034 K097	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T)	K069 K100 Veterinary K084	Lead: Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the produc-
K031 K032 K033 K034	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in	K069 K100 Veterinary K084	Lead:     Emission control dust/sludge from secondary lead smelting. (T)     Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)     Pharmaceuticals:     Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)     Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arse-
K031 K032 K033 K034 K097	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T)	K069 K100 Veterinary K084	Lead: Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K031 K032 K033 K034 K097	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in	K069 K100 Veterinary K084	Lead:     Emission control dust/sludge from secondary lead smelting. (T)     Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)     Pharmaceuticals:     Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)     Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arse-
K031 K032 K033 K034 K097	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the pro-	K069 K100 Veterinary K084	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or
K031 K032 K033 K034 K097 K035 K036 K037	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T)	K069 K100  Veterinary K084  K101  K102	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K031 K032 K033 K034 K097 K035 K036	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T) Wastewater from the washing and stripping	K069 K100 Veterinary K084 K101 K102 Ink Formu	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K031 K032 K033 K034 K097 K035 K036 K037 K038	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T) Wastewater from the washing and stripping of phorate production. (T)	K069 K100  Veterinary K084  K101  K102	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) lation: Solvent washes and sludges, caustic washes
K031 K032 K033 K034 K097 K035 K036 K037	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T) Wastewater from the washing and stripping of phorate production. (T) Filter cake from the filtration of diethylphos-	K069 K100 Veterinary K084 K101 K102 Ink Formu	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) lation: Solvent washes and sludges, caustic washes and sludges, or water washes and sludges
K031 K032 K033 K034 K097 K035 K036 K037 K038	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T) Wastewater from the washing and stripping of phorate production. (T) Filter cake from the filtration of diethylphosphorodithioic acid in the production of pho-	K069 K100 Veterinary K084 K101 K102 Ink Formu	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) lation: Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in
K031 K032 K033 K034 K097 K035 K036 K037 K038 K039	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T) Wastewater from the washing and stripping of phorate production. (T) Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (T)	K069 K100 Veterinary K084 K101 K102 Ink Formu	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)  Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)  lation: 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,
K031 K032 K033 K034 K097 K035 K036 K037 K038	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T) Wastewater from the washing and stripping of phorate production. (T) Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (T) Wastewater treatment sludge from the pro-	K069 K100 Veterinary K084 K101 K102 Ink Formu	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) lation: 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
K031 K032 K033 K034 K097 K035 K036 K037 K038 K039	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T) Wastewater from the washing and stripping of phorate production. (T) Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (T) Wastewater treatment sludge from the production of phorate. (T)	K069 K100 Veterinary K084 K101 K102 Ink Formu K086	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)  Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)  lation: 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,
K031 K032 K033 K034 K097 K035 K036 K037 K038 K039	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T) Wastewater from the washing and stripping of phorate production. (T) Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (T) Wastewater treatment sludge from the pro-	K069 K100 Veterinary K084 K101 K102 Ink Formu	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T) Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) lation: 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
K031 K032 K033 K034 K097 K035 K036 K037 K038 K039	of MSMA and cacodylic acid. (T) Wastewater treatment sludge from the production of chlordane. (T) Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T) Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T) Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T) Wastewater treatment sludges generated in the production of creosote. (T) Still bottoms from toluene reclamation distillation in the production of disulfoton. (T) Wastewater treatment sludges from the production of disulfoton. (T) Filter cake from the washing and stripping of phorate production. (T) Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (T) Wastewater treatment sludge from the production of phorate. (T)	K069 K100 Veterinary K084 K101 K102 Ink Formu K086	Emission control dust/sludge from secondary lead smelting. (T) Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)  Pharmaceuticals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T) Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)  lation: 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)

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K087	Decanter tank tar sludge from coking opera-	(ii)	Generators and treatment, storage and dis-
K141	tions. (T) 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).		posal 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
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.		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
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.	c(i)	aggressive biological treatment unit. 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
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.	(ii) (A)	lateral particle movement. For the purposes of the F038 listing, Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	(B)	cessation of lateral particle movement and Floats are considered to be generated at the moment they are formed in the top of the unit.
K147	Tar storage tank residues from coal tar refining.		State Sources
K148	Residues from coal tar distillation, including but not limited to, still bottoms.  Footnotes	WPCB	Discarded transformers, capacitors or bushings containing polychlorinated biphenyls (PCB) at concentrations of 2 parts per million
1 2 a b(i)	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. Listing Specific Definitions: For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids. 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.	(2)	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.)  Listing Specific Definitions: For the purposes of the K181 listing, dyes and/or pigments production is defined to include manufacture of the following product classes: Dyes, pigments, or FDA certified colors that are classified as azo, triarylmethane, perylene or anthraquinone classes. Azo products include azo, monoazo, diazo, triazo, polyazo, azoic, benzidine, and pyrazolone products.  Triarylmethane products include both triarylmethane and triphenylmethane products.  Wastes that are not generated at a dyes and/or pigments manufacturing site, such as wastes from the off site use, formulation, and packaging of dyes and/or pigments, are not included in the K181 listing.

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(i)

(ii)

(iii)

(c)

(3)	K181 Listing Levels. Nonwastewaters con-
	taining constituents in amounts equal to or
	exceeding the following levels during any
	calendar year are subject to the K181 listing,
	unless the conditions in the K181 listing are
	met.

	Chemical	Mass Lev-
Constituent	Abstracts No.	els (kg/yr)
Aniline	62-53-3	9,300
o-Anisidine	90-04-0	110
4-Chloroaniline	106-47-8	4,800
p-Cresidine	120-71-8	660
2,4-Dimethylaniline	95-68-1	100
1,2-Phenylenediamine	95-54-5	710
1,3-Phenylenediamine	108-45-2	1,200

- (4) Procedures for demonstrating that dyes and/or pigment nonwastewaters are not K181. The procedures described in (a) through (c) and (e) of this subsection establish when nonwastewaters from the production of dyes/pigments would not be hazardous (these procedures apply to wastes that are not disposed in landfill units or treated in combustion units as specified in subsection (1) - the K181 listing - of this section). If the nonwastewaters are disposed in landfill units or treated in combustion units as described in subsection (1) of this section, then the nonwastewaters are not hazardous. In order to demonstrate that it is meeting the landfill disposal or combustion conditions contained in the K181 listing description, the generator must maintain documentation as described in (d) of this subsection.
- (a) Determination based on no K181 constituents. Generators that have knowledge (for example, knowledge of constituents in wastes based on prior sampling and analysis data and/or information about raw materials used, production processes used, and reaction and degradation products formed) that their wastes contain none of the K181 constituents (see subsection (3) of this section) can use their knowledge to determine that their waste is not K181. The generator must document the basis for all such determinations on an annual basis and keep each annual documentation for three years.
- (b) Determination for generated quantities of 1,000 MT/yr or less for wastes that contain K181 constituents. If the total annual quantity of dyes and/or pigment nonwastewaters generated is 1,000 metric tons or less, the generator can use knowledge of the wastes (for example, knowledge of constituents in wastes based on prior analytical data and/or information about raw materials used, production

processes used, and reaction and degradation products formed) to conclude that annual mass loadings for the K181 constituents are below the listing levels of this subsection. To make this determination, the generator must: Each year document the basis for determining that the annual quantity of nonwastewaters expected to be generated will be less than 1,000 metric tons.

Track the actual quantity of nonwastewaters generated from January 1 through December 31 of each year. If, at any time within the year, the actual waste quantity exceeds 1,000 metric tons, the generator must comply with the requirements of (c) of this subsection for the remainder of the year.

Keep a running total of the K181 constituent mass loadings over the course of the calendar year.

(iv) Keep the following records on-site for the three most recent calendar years in which the hazardous waste determinations are made:

(A) The quantity of dyes and/or pigment non-

wastewaters generated.
(B) The relevant process information used.

(C) The calculations performed to determine annual total mass loadings for each K181 constituent in the nonwastewaters during the year.

Determination for generated quantities

greater than 1,000 MT/yr for wastes that con-

tain K181 constituents. If the total annual quantity of dyes and/or pigment nonwastewaters generated is greater than 1,000 metric tons, the generator must perform all of the steps described in paragraphs (d)(3)(i) -(d)(3)(xi) of this subsection in order to make a determination that its waste is not K181. (i) Determine which K181 constituents (see (c) of this subsection) are reasonably expected to be present in the wastes based on knowledge of the wastes (for example, based on prior sampling and analysis data and/or information about raw materials used, production processes used, and reaction and degradation products formed).

(ii) If 1,2-phenylenediamine is present in the wastes, the generator can use either knowledge or sampling and analysis procedures to determine the level of this constituent in the wastes. For determinations based on use of knowledge, the generator must comply with the procedures for using knowledge described in paragraph (d)(2) of this subsection and keep the records described in paragraph (d)(2)(iv) of this subsection. For determinations based on sampling and analysis, the generator must comply with the sampling and analysis and recordkeeping requirements described below in this subsection.

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- (iii) Develop a waste sampling and analysis plan (or modify an existing plan) to collect and analyze representative waste samples for the K181 constituents reasonably expected to be present in the wastes. At a minimum, the plan must include:
- (A) A discussion of the number of samples needed to characterize the wastes fully;
- (B) The planned sample collection method to obtain representative waste samples;
- (C) A discussion of how the sampling plan accounts for potential temporal and spatial variability of the wastes;
- (D) A detailed description of the test methods to be used, including sample preparation, clean up (if necessary), and determinative methods.
- (iv) Collect and analyze samples in accordance with the waste sampling and analysis plan.
- (A) The sampling and analysis must be unbiased, precise, and representative of the wastes;
- (B) The analytical measurements must be sufficiently sensitive, accurate and precise to support any claim that the constituent mass loadings are below the listing levels of subsection (3) of this section.
- (v) Record the analytical results.
- (vi) Record the waste quantity represented by the sampling and analysis results.
- (vii) Calculate constituent-specific mass loadings (product of concentrations and waste quantity).
- (viii) Keep a running total of the K181 constituent mass loadings over the course of the calendar year.
- (ix) Determine whether the mass of any of the K181 constituents listed in subsection (3) of this section generated between January 1 and December 31 of any year is below the K181 listing levels.
- (x) Keep the following records on-site for the three most recent calendar years in which the hazardous waste determinations are made:
- (A) The sampling and analysis plan.
- (B) The sampling and analysis results (including QA/QC data).
- (C) The quantity of dyes and/or pigment non-wastewaters generated.
- (D) The calculations performed to determine annual mass loadings.
- (xi) Nonhazardous waste determinations must be conducted annually to verify that the wastes remain nonhazardous.
- (A) The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are nonhazardous. The generator can then use knowledge of the wastes to support subsequent annual determinations.

- (B) The annual testing requirements are reinstated if the manufacturing or waste treatment processes generating the wastes are significantly altered, resulting in an increase of the potential for the wastes to exceed the listing levels.
- (C) If the annual testing requirements are suspended, the generator must keep records of the process knowledge information used to support a nonhazardous determination. If testing is reinstated, a description of the process change must be retained.
- (d) Recordkeeping for the landfill disposal and combustion exemptions. For the purposes of meeting the landfill disposal and combustion condition set out in the K181 listing description, the generator must maintain on-site for three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or meets the landfill design standards set out in the listing description, or was treated in combustion units as specified in the listing description.
- (e) Waste holding and handling. During the interim period, from the point of generation to completion of the hazardous waste determination, the generator is responsible for storing the wastes appropriately. If the wastes are determined to be hazardous and the generator has not complied with the Hazardous Waste Management Act and the dangerous waste regulation requirements during the interim period, the generator could be subject to an enforcement action for improper management.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 09-14-105 (Order 07-12), § 173-303-9904, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-9904, filed 11/30/04, effective 1/1/05; 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.]

**Reviser's note:** RCW 34.05.395 requires the use of underlining and deletion marks to indicate amendments to existing rules, and deems ineffectual changes not filed by the agency in this manner. The bracketed material in the above section does not appear to conform to the statutory requirement.

# 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)

[Ch. 173-303 WAC—p. 240] (6/30/09)

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-(aminothioxomethyl)-)

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,-hexa-hydro-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)

o-Anisidine (2-methoxyaniline)(Benzenamine, 2-Methoxy-)

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-chloro-ethyl)aminolbenzene-)

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(dimethyl-carbamodithioato-S,S')-,)

Creosote

p-Cresidine (2-Methoxy-5-methylbenzenamine)

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-ace-tyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-tri-hydroxy-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,alphadiethyl, 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)-)

2,4-Dimethylaniline (2,4-xylidine) (Benzenamine,2,4-dimethyl-)

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-[(dimethyl-amino) 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<sub>2</sub>N)C (S)]<sub>2</sub>NH)

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]phe-nyl-,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-, Noxide, 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-)

Octachlorodibenzo-p-dioxin (OCDD) 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin

Octachlorodibenzofuran (OCDF) 1,2,3,4,6,7,8,9-Octachlorodibenzofuran

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-)

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Perchloromethyl mercaptan (Methanesulferryl chloride, trichloro-)

Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)

Phenol (Benzene, hydroxy-)

1,2-Phenylenediamine (1,2-Benzenediamine)

1,3-Phenylenediamine (1,3-Benzenediamine)

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 methyl-carbamate 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-propy-nyl)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-(phenyl-methyl) 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-)<sup>1</sup>

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. 09-14-105 (Order 07-12), § 173-303-9905, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-9905, filed 11/30/04, effective 1/1/05. 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 6/26/87; 86-12-057 (Order DE-85-10), § 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:

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#### **Dangerous Waste Regulations**

SPECIAL WASTE BILL OF LADING EXAMPLE

6) 7)	Amount of waste: 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  tomer Must Initial the Appropriate Item.  _1. Wastes were designated through testing _2. Wastes were designated by other means
Cus	comer Certifies That:
1. 2.	The Waste sampled and intended for disposal under this Certification is special waste as defined in WAC 173-303-040. The Waste has no free liquids per WAC 173-303-110 (3)(c)(i).
Sign	nature Date

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30),  $\S$  173-303-9906, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33),  $\S$  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  $\S$  3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42),  $\S$  173-303-9906, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4),  $\S$  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),  $\S$  173-303-9906, filed 2/10/82.]

(6/30/09) [Ch. 173-303 WAC—p. 247]

#### 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.]

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