(4) Each agency employing personnel covered by RCW 43.101.220 shall be responsible for full and complete compliance with the above training requirements. Additionally, each such agency shall provide the commission with employment information necessary for the establishment and maintenance of complete and accurate training records on all affected employees.

[Statutory Authority: RCW 43.101.220. 95-08-036 and 95-09-070, § 139-10-210, filed 3/30/95 and 4/19/95, effective 4/30/95 and 5/20/95. Statutory Authority: RCW 43.101.080(2). 87-19-105 (Order 15-D), § 139-10-210, filed 9/18/87; 86-19-021 (Order 1-B), § 139-10-210, filed 9/10/86. Formerly WAC 139-36-020.]

Title 173 WAC
ECOLOGY, DEPARTMENT OF

Chapters

Chapter 173-06 WAC
DELEGATION OF POWERS

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-06-010 Introduction. [Order DE 71-13, § 173-06-010, filed 9/8/71.] Repealed by 95-07-058 (Order 94-45), filed 3/9/95, effective 4/9/95. Statutory Authority: RCW 43.21A.090.

173-06-020 Definitions. [Order DE 71-13, § 173-06-020, filed 9/8/71.] Repealed by 95-07-058 (Order 94-45), filed 3/9/95, effective 4/9/95. Statutory Authority: RCW 43.21A.090.

173-06-030 Delegation. [Statutory Authority: Chapter 43.21A RCW. 89-11-021 and 90-07-014 (Order 89-6 and 89-6A), § 173-06-030, filed 5/11/89 and 3/13/90, effective 4/13/90. Statutory Authority: RCW 43.21A.090. 85-24-019 (Order 85-25), § 173-06-030, filed 11/26/85; Order DE 75-7, § 173-06-030, filed 5/16/75; Order DE 71-13, § 173-06-030, filed 9/8/71.] Repealed by 95-07-058 (Order 94-45), filed 3/9/95, effective 4/9/95. Statutory Authority: RCW 43.21A.090.

173-06-040 Director's powers. [Order DE 71-13, § 173-06-040, filed 9/8/71.] Repealed by 95-07-058 (Order 94-45), filed 3/9/95, effective 4/9/95. Statutory Authority: RCW 43.21A.090.

WAC 173-06-010 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-06-020 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-06-030 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-06-040 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-06-100 Introduction. Under the provisions of RCW 43.21A.090, the director of ecology may delegate the performance of his or her powers, duties, and functions, other than those relating to the adoption, amendment or rescission of rules and regulations, to employees of the department whenever that appears desirable to fulfill the purposes of the laws implemented by the department.

[Statutory Authority: RCW 43.21A.090. 95-07-058 (Order 94-45), § 173-06-100, filed 3/9/95, effective 4/9/95.]

WAC 173-06-110 Definitions. As used in this chapter:

(1) "Department" shall mean the department of ecology;

(2) "Director" shall mean the person bearing such title created pursuant to RCW 43.21A.050. "Deputy director" shall mean the person bearing such title created pursuant to RCW 43.21A.100.

[Statutory Authority: RCW 43.21A.090. 95-07-058 (Order 94-45), § 173-06-110, filed 3/9/95, effective 4/9/95.]

WAC 173-06-120 Delegation. (1) The authority delegated hereby includes the authority to:

(a) Act on behalf of the department in the administration of programs and all other duties assigned the department; and

(b) Approve or deny engineering reports, plans and specifications, or amendments thereto, required to be submitted to the department.

Delegated powers include, but are not limited to, the authority to issue orders, directives or decisions reviewable before appropriate administrative or judicial bodies. The delegation established by this rule shall be effective when the person to whom delegation is made has been issued a letter from the director authorizing him or her to act for the department with respect to the specifics set forth in such letter.

(2) Whenever an individual is delegated the authority to approve or deny engineering reports, plans and specifications, or amendments thereto, such approval or denial must be based on engineering services provided by a registered professional engineer in accordance with current state law.

(3) Any person who has been properly designated to serve in a temporary or acting capacity for an employee who has been delegated authority under this rule shall have the same delegated authority as the individual permanently holding the position.

(4) In the absence of a person who has been delegated authority by the director, managers senior to that person may perform the delegated functions in accordance with their letters of authorization.

(5) In addition to the delegation provided for in the preceding subsections, the director may, under special circumstances, delegate in writing specific signature authority to any department employee.

(6) The authority delegated in this rule is limited to the power to act for the department in carrying out functions within the power of the department, and shall not be construed to authorize acts which are contrary to law or beyond the authority of the department.

[Statutory Authority: RCW 43.21A.090. 95-07-058 (Order 94-45), § 173-06-120, filed 3/9/95, effective 4/9/95.]

WAC 173-06-130 Director's powers. The director may perform all powers, duties and functions within the authority of the department. The delegations authorized by this chapter shall not preclude the director from exercising any of the powers, duties and functions delegated. In the director's absence, the deputy director may act as director.

[Statutory Authority: RCW 43.21A.090. 95-07-058 (Order 94-45), § 173-06-130, filed 3/9/95, effective 4/9/95.]

Chapter 173-08 WAC
ENVIRONMENTAL COORDINATION PROCEDURES ACT OF 1973—MASTER APPLICATION PROCEDURES

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-08-010 Authority. [Order DE 77-23, § 173-08-010, filed 12/1/77; Order 74-6, § 173-08-010, filed 5/1/74.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-08-020 Purpose. [Order DE 77-23, § 173-08-020, filed 12/1/77; Order 74-6, § 173-08-020, filed 5/1/74.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-08-030 Definitions. [Order DE 77-23, § 173-08-030, filed 12/1/77; Order 74-6, § 173-08-030, filed 5/1/74.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-08-040 Master application form. [Order DE 77-23, § 173-08-040, filed 12/1/77; Order 74-6, § 173-08-040, filed 5/1/74.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-08-050 Scope of master application procedure. [Order DE 77-23, § 173-08-050, filed 12/1/77; Order 74-6, § 173-08-050, filed 5/1/74.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-08-065 Modification of the proposed project. [Order DE 77-23, § 173-08-065, filed 12/1/77.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-08-070 Appeals to final decisions. [Order DE 77-23, § 173-08-070, filed 12/1/77.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

WAC 173-08-010 through 173-08-070 Repealed. See Disposition Table at beginning of this chapter.

Chapter 173-09 WAC
COORDINATED PERMIT PROCESS

WAC

WAC 173-09-010 Authority and purpose. (1) This chapter is promulgated under the authority of chapter 90.60 RCW (Environmental permit assistance).

(2) The purpose of this chapter is to establish rules to implement the state coordinated permit process.

(3) The purpose of the coordinated permit process is to:

(a) Assist individuals, businesses, and public agencies in complying with environmental quality laws in an expedited fashion, without reducing protection of public health and safety and the environment;

(b) Promote effective dialogue and facilitate the transfer and clarification of technical information, while preventing duplication and minimizing potential conflict between applicable regulatory procedures;

(c) Ensure, where possible, that applicable permit requirements, criteria, and hearings and comment periods are identified, integrated, coordinated, and run concurrently, rather than consecutively;

(d) Promote active coordination of all applicable regulatory and land-use permitting procedures; and

(e) Provide consolidated, effective, and easier opportunities for members of the public to receive information and present their views about proposed projects.

(4) The coordinated permit process is optional for project proponents and intended to provide predictability, administrative consolidation, and, where possible, consolidation of appeal processes. The process is not intended to replace individual laws, nor diminish the substantive decision-making role of individual jurisdictions. The process is also not intended to limit nor abridge the authority of individual permit agencies to make all decisions on all nonprocedural matters regarding their respective component permits, including but not limited to, the determination of permit application completeness, permit approval or approval with conditions, or permit denial.

[Statutory Authority: RCW 90.60.040. 95-24-040 (Order 95-13), § 173-09-010, filed 11/30/95, effective 12/31/95.]

WAC 173-09-020 Definitions. The following definitions shall apply throughout this chapter, unless the context clearly requires otherwise:

(1) "Applicant" means any person or entity, including an agency, applying for a permit from a permit agency. For the purposes of this chapter, "applicant," "project applicant," and "project proponent" are synonymous terms.

(2) "Coordinating permit agency" means the permit agency that is the lead agency for purposes of chapter 43.21C RCW (State Environmental Policy Act (SEPA)), or has the greatest overall jurisdiction over a project as determined under WAC 173-09-030 (coordinated permit process rule).

(3) "Lead agency" means the agency with the main responsibility for complying with SEPA's procedural requirements as set forth in WAC 197-11-758 (SEPA rules).

(4) "Participating permit agency" means a permit agency, other than the coordinating permit agency, that is responsible for the issuance of a permit for a project.

(5) "Permit" means any license, certificate, registration, permit, or other form of authorization required by a permit agency to engage in a particular activity.

(6) "Permit agency" means:

(a) The department of ecology, an air pollution control authority, the department of natural resources, the department of fish and wildlife, and the department of health; and

(b) Any other state or federal agency or county, city, or town that participates at the request of the permit applicant and upon the agency's agreement to be subject to this chapter.

(7) "Permit assistance center" or "center" means the center established in the department of ecology by RCW 90.60.030 (Permit assistance center—Duties).

(8) "Project" means a proposed activity, the conduct of which requires permits from one or more permit agencies.

[Statutory Authority: RCW 90.60.040. 95-24-040 (Order 95-13), § 173-09-020, filed 11/30/95, effective 12/31/95.]

WAC 173-09-030 Designation of a coordinating permit agency. (1) Applicant information requirements. Upon request by an applicant, the permit assistance center shall designate a coordinating permit agency. The applicant shall provide the permit assistance center with the following:

(a) Description of the proposed project, including the location and legal description (i.e., parcel number, and section, township, and range);

(b) Preliminary list of the permits that the proposed project may require;

(c) Identity of the participating permit agencies;

(d) Identity of any public agency that has been or may be designated the lead agency for the proposed project pursuant to chapter 43.21C RCW (SEPA); and

(e) Any additional or more detailed information requested by the center necessary to make the designation. Such information may include, but is not limited to:

(i) Site plan for the proposed project showing where activities are proposed relative to known sensitive areas, habitats, and critical areas; and

(ii) Proposed timing of construction and operation of the project.

(2) Designation criteria and guidance.

(a) If a permit agency is the lead agency under the criteria in WAC 197-11-926 through 197-11-940 (SEPA rules), that permit agency shall be the coordinating permit agency.

(b) If a permit agency has assumed lead agency status under WAC 197-11-942 (SEPA rules), that permit agency shall be the coordinating permit agency.

(c) If two or more permit agencies have agreed to share lead agency status under WAC 197-11-944 (SEPA rules), one of the permit agencies shall, upon agreement with the other permit agency(ies) with whom lead agency status is shared, be the coordinating permit agency.

(d) If none of the permit agencies are lead agency for purposes of chapter 43.21C RCW (SEPA), then the coordinating permit agency shall be the permit agency with the greatest overall jurisdiction over the proposed project. In identifying the permit agency with the greatest overall jurisdiction the center shall consider the following factors:

(i) The types of facilities or activities that make up the proposed project;

(ii) The types of public health and safety and environmental concerns that should be considered in issuing permits for the proposed project;

(iii) The environmental media that may be affected by the proposed project, the extent of those potential effects, and the environmental protection measures that may be taken to prevent the occurrence of, or to mitigate, those potential effects;

(iv) The regulatory activity that is of greatest importance in preventing or mitigating the effects that the proposed project may have on public health and safety or the environment;

(v) The statutory and regulatory requirements that apply to the proposed project and the complexity of those requirements;

(vi) The extent to which a permit agency will assume a major coordination role due to other processes;

(vii) The extent to which the lead agency determination criteria identified in WAC 197-11-946(2) (SEPA rules) are applicable; and

(viii) The extent to which a permit agency has permit coordination expertise.

(e) In designating the coordinating permit agency, the permit assistance center may convene a scoping meeting of the likely coordinating permit agency and participating

permit agencies in order to designate the coordinating permit agency.

[Statutory Authority: RCW 90.60.040. 95-24-040 (Order 95-13), § 173-09-030, filed 11/30/95, effective 12/31/95.]

Chapter 173-10 WAC
PERMIT PROCESSING PROCEDURE APPLICABLE TO TWO OR MORE PERMIT PROGRAMS

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-10-010 Authority. [Order DE 75-26, § 173-10-010, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-020 Purpose. [Order DE 75-26, § 173-10-020, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-030 Definitions. [Order DE 75-26, § 173-10-030, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-040 Single application form. [Order DE 75-26, § 173-10-040, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-050 Public notice. [Order DE 75-26, § 173-10-050, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-060 Procedures superseded. [Order DE 75-26, § 173-10-060, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-070 Public hearing. [Order DE 75-26, § 173-10-070, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-080 Public notice of public hearing. [Order DE 75-26, § 173-10-080, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-090 Scope of single application procedure. [Order DE 75-26, § 173-10-090, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-100 Final action on the single application. [Order DE 75-26, § 173-10-100, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

173-10-110 Appeal. [Order DE 75-26, § 173-10-110, filed 11/7/75.] Repealed by 95-24-040 (Order 95-13), filed 11/30/95, effective 12/31/95. Statutory Authority: RCW 90.60.040.

WAC 173-10-010 through 173-10-110 Repealed. See Disposition Table at beginning of this chapter.

Chapter 173-12 WAC
GENERAL PROCEDURE

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-12-010 Purpose. [Order DE 70-11, § 173-12-010, filed 1/5/71.] Repealed by 95-09-036 (Order 94-47), filed 4/13/95, effective 5/14/95. Statutory Authority: Chapter 43.21 and 34.05 RCW.

173-12-020 Scope of directions—Requests for advice and guidance. [Order DE 70-11, § 173-12-020, filed 1/5/71.] Repealed by 95-09-036 (Order 94-47), filed 4/13/95, effective 5/14/95. Statutory Authority: Chapter 43.21 and 34.05 RCW.

173-12-030 Requests of the director for advice and guidance. [Order 71-10, § 173-12-030, filed 8/4/71; Order DE 70-11, § 173-12-030, filed 1/5/71.] Repealed by 95-09-036 (Order 94-47), filed 4/13/95, effective 5/14/95. Statutory Authority: Chapter 43.21 and 34.05 RCW.

173-12-040 Ecological commission submission of views. [Order DE 70-11, § 173-12-040, filed 1/5/71.] Repealed by 95-09-036 (Order 94-47), filed 4/13/95, effective 5/14/95. Statutory Authority: Chapter 43.21 and 34.05 RCW.

173-12-050 Adoption of regulations. [Order 71-10, § 173-12-050, filed 8/4/71; Order DE 70-11, § 173-12-050, filed 1/5/71.] Repealed by 95-09-036 (Order 94-47), filed 4/13/95, effective 5/14/95. Statutory Authority: Chapter 43.21 and 34.05 RCW.

173-12-060 Meetings. [Order DE 72-16, § 173-12-060, filed 6/30/72.] Repealed by 95-09-036 (Order 94-47), filed 4/13/95, effective 5/14/95. Statutory Authority: Chapter 43.21 and 34.05 RCW.

WAC 173-12-010 through 173-12-060 Repealed. See Disposition Table at beginning of this chapter.

Chapter 173-19 WAC
SHORELINE MANAGEMENT ACT OF 1971—STATE MASTER PROGRAM

WAC

WAC 173-19-1301 Port Angeles, city of. City of Port Angeles master program approved August 5, 1976. Revision approved June 2, 1995.

[Statutory Authority: Chapter 90.58 RCW. 95-12-057 (Order 94-28), § 173-19-1301, filed 6/2/95, effective 7/3/95. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-1301, filed 1/30/80.]

WAC 173-19-250 King County. King County master program approved July 8, 1976. Revision approved November 22, 1976. Revision approved June 30, 1978. Revision approved July 5, 1979. Revision approved September 23, 1981. Revision approved February 9, 1982. Revision approved March 14, 1984. Revision approved June 18, 1985. Revision approved January 22, 1991. Revision approved September 29, 1995.

[Statutory Authority: Chapter 90.58 RCW. 95-20-046 (Order 95-01), § 173-19-250, filed 9/29/95, effective 10/30/95. Statutory Authority: RCW 90.58.200. 91-03-149 (Order 90-52), § 173-19-250, filed 1/23/91, effective 2/23/91. Statutory Authority: RCW 90.58.120 and 90.58.200. 85-13-054 (Order 85-17), § 173-19-250, filed 6/18/85; 84-07-025 (Order DE 84-6), § 173-19-250, filed 3/15/84; 82-05-018 (Order DE 81-54), § 173-19-250, filed 2/9/82; 81-20-006 (Order DE 81-24), § 173-19-250, filed 9/24/81. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-250, filed 1/30/80; 79-09-131 (Order DE 79-16), § 173-19-250, filed 9/5/79; 79-09-001 (Order DE 79-6), § 173-19-250, filed 8/2/79; Order DE 77-28, § 173-19-250, filed 10/24/77; Order DE 77-16, § 173-19-250, filed 9/9/77; Order DE 76-15, § 173-19-250, filed 5/3/76; Order DE 75-21, § 173-19-250, filed 8/12/75; Order DE 74-23, § 173-19-250, filed 12/30/74.]

WAC 173-19-2519 Redmond, city of. City of Redmond master program approved September 20, 1974. Revision approved December 15, 1981. Revision approved October 20, 1986. Revision approved January 2, 1990. Revision approved August 7, 1995.

[Statutory Authority: Chapter 90.58 RCW. 95-17-039 (Order 95-07), § 173-19-2519, filed 8/10/95, effective 9/10/95. Statutory Authority: RCW 90.58.200. 90-02-101 (Order 89-58), § 173-19-2519, filed 1/3/90, effective 2/3/90. Statutory Authority: RCW 90.58.120 and 90.58.200. 86-21-110 (Order DE 86-27), § 173-19-2519, filed 10/20/86; 82-01-048 (Order DE 81-42), § 173-19-2519, filed 12/16/81. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-2519, filed 1/30/80.]

WAC 173-19-2521 Seattle, city of. City of Seattle master program approved June 30, 1976. Revision approved March 11, 1977. Revision approved September 10, 1980. Revision approved February 24, 1981. Revision approved May 14, 1981. Revision approved October 1, 1981. Revision approved January 5, 1982. Revision approved February 24, 1983. Revision approved June 7, 1983. Revision approved July 12, 1983. Revision approved October 13, 1983. Revision approved October 1, 1985. Revision approved October 20, 1986. Revision approved February 11, 1987. Revision approved November 10, 1987. Revision approved October 2, 1990. Revision approved September 16, 1992. Revision approved February 2, 1993. Revision approved May 18, 1993. Revision approved October 20, 1994. Revision approved July 21, 1995.

[Statutory Authority: Chapter 90.58 RCW. 95-16-024 (Order 95-08), § 173-19-2521, filed 7/21/95, effective 8/21/95; 94-22-017 (Order 94-24), § 173-19-2521, filed 10/21/94, effective 11/21/94. Statutory Authority: RCW 90.58.200. 93-12-011, § 173-19-2521, filed 5/20/93, effective 6/20/93; 93-04-106 (Order 92-48), § 173-19-2521, filed 2/3/93, effective 3/6/93; 92-19-090 (Order 92-15), § 173-19-2521, filed 9/16/92, effective 10/17/92; 90-20-111 (Order 90-35), § 173-19-2521, filed 10/2/90, effective 11/2/90. Statutory Authority: RCW 90.58.120 and 90.58.200. 87-24-067 (Order DE 87-24), § 173-19-2521, filed 12/1/87; 87-05-015 (Order DE 86-41), § 173-19-2521, filed 2/11/87; 86-21-109 (Order DE 86-28), § 173-19-2521, filed 10/20/86; 85-20-094 (Order DE 85-21), § 173-19-2521, filed 10/1/85; 83-21-094 (Order DE 83-27), § 173-19-2521, filed 10/19/83; 83-15-014 (Order DE 83-19), § 173-19-2521, filed 7/12/83; 83-13-029 (Order DE 83-4), § 173-19-2521, filed 6/7/83; 83-07-081 (Order DE 83-4), § 173-19-2521, filed 3/23/83; 82-02-079 (Order DE 81-44), § 173-19-2521, filed 1/6/82; 81-20-043 (Order DE 81-28), § 173-19-2521, filed 10/1/81; 81-11-029 (Order DE 81-12), § 173-19-2521, filed 5/15/81; 81-06-051 (Order DE 81-2), § 173-19-2521, filed 2/27/81; 80-13-031 (Order DE 80-34), § 173-19-2521, filed 9/10/80. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-2521, filed 1/30/80.]

WAC 173-19-3101 Shelton, city of. City of Shelton master program approved March 18, 1975. Revision approved December 18, 1975. Revision approved April 28, 1995.

[Statutory Authority: Chapter 90.58 RCW. 95-10-051 (Order 94-29), § 173-19-3101, filed 5/2/95, effective 6/2/95. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-3101, filed 1/30/80.]

WAC 173-19-3507 Orting, city of. Town of Orting master program approved April 8, 1975. Revision approved March 31, 1995.

[Statutory Authority: RCW 90.58.200. 95-08-042 (Order 94-26), § 173-19-3507, filed 3/31/95, effective 5/1/95. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-3507, filed 1/30/80.]

WAC 173-19-3514 Tacoma, city of. City of Tacoma master program approved April 5, 1977. Revision approved December 5, 1979. Revision approved March 17, 1981. Revision approved November 23, 1981. Revision approved April 6, 1982. Revision approved May 24, 1983. Revision approved March 1, 1984. Revision approved May 9, 1984. Revision approved April 18, 1985. Revision approved July 23, 1986. Revision approved September 16, 1987. Revision approved May 15, 1990. Revision approved December 15, 1992. Revision approved May 5, 1995.

[Statutory Authority: RCW 90.58.200. 95-11-008 (Order 94-25), § 173-19-3514, filed 5/5/95, effective 6/5/95; 93-01-110 (Order 92-44), § 173-19-3514, filed 12/18/92, effective 1/18/93; 90-11-072 (Order 90-05), § 173-19-3514, filed 5/16/90, effective 6/16/90. Statutory Authority: RCW 90.58.120 and 90.58.200. 87-19-111 (Order DE 87-34), § 173-19-3514, filed 9/18/87; 86-16-004 (Order DE 86-18), § 173-19-3514, filed 7/24/86; 85-10-013 (Order 85-03), § 173-19-3514, filed 4/19/85; 84-11-015 (Order DE 84-16), § 173-19-3514, filed 5/9/84; 84-06-043 (Order DE 83-40), § 173-19-3514, filed 3/2/84; 83-12-018 (Order DE 83-16), § 173-19-3514, filed 5/24/83; 82-10-002 (Order DE 82-06), § 173-19-3514, filed 4/23/82; 81-24-072 (Order DE 81-37), § 173-19-3514, filed 12/2/81; 81-08-005 (Order DE 81-4), § 173-19-3514, filed 3/19/81; 80-04-026 (Order DE 80-10), § 173-19-3514, filed 3/18/80. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-3514, filed 1/30/80.]

WAC 173-19-360 San Juan County. San Juan County master program approved May 28, 1976. Revision approved October 29, 1976. Revision approved April 13, 1981. Revision approved October 30, 1984. Revision approved April 19, 1989. Revision approved March 14, 1990. Revision approved May 15, 1990. Revision approved June 19, 1990. Revision approved February 5, 1991. Revision approved June 4, 1991. Revision approved August 18, 1992. Revision approved October 20, 1992. Revision approved June 28, 1994. Revision approved March 22, 1995. Revision approved September 6, 1995.

[Statutory Authority: Chapter 90.58 RCW. 95-18-102, § 173-19-360, filed 9/6/95 effective 10/7/95; 95-07-125 (Order 94-41), § 173-19-360, filed 3/22/95, effective 4/22/95. Statutory Authority: RCW 90.58.200. 94-14-030 (Order 94-16), § 173-19-360, filed 6/28/94, effective 7/29/94; 93-01-138 (Order 92-40), § 173-19-360, filed 12/22/92, effective 1/22/93; 92-17-074 (Order 92-31), § 173-19-360, filed 8/19/92, effective 9/19/92; 91-12-054 (Order 91-18), § 173-19-360, filed 6/5/91, effective 7/6/91; 91-04-072 (Order 90-59), § 173-19-360, filed 2/5/91, effective 3/8/91; 90-11-072 and 90-13-089 (Order 90-03 and 90-03A), § 173-19-360, filed 5/16/90 and 6/20/90, effective 6/16/90 and 7/21/90. Statutory Authority: RCW 90.58.120 and 90.58.200. 89-09-077 and 90-07-026 (Order DE 88-22 and DE 88-22A), § 173-19-360, filed 4/19/89 and 3/14/90, effective 4/14/90; 84-22-016 (Order DE 84-36), § 173-19-360, filed 10/31/84; 81-09-057 (Order DE 81-8), § 173-19-360, filed 4/17/81. Statutory Authority: RCW

90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-360, filed 1/30/80; 79-09-001 (Order DE 79-6), § 173-19-360, filed 8/2/79; Order DE 77-16, § 173-19-360, filed 9/9/77; Order DE 74-23, § 173-19-360, filed 12/30/74.]

WAC 173-19-370 Skagit County. Skagit County master program approved October 5, 1976. Revision approved January 5, 1979. Revision approved May 11, 1979. Revision approved March 3, 1980. Revision approved September 10, 1980. Revision approved December 10, 1980. Revision approved September 23, 1981. Revision approved November 23, 1981. Revision approved August 19, 1982. Revision approved February 24, 1983. Revision approved March 22, 1984. Revision approved October 27, 1987. Revision approved May 30, 1995.

[Statutory Authority: Chapter 90.58 RCW. 95-12-026 (Order 94-42), § 173-19-370, filed 5/31/95, effective 7/1/95. Statutory Authority: RCW 90.58.120 and 90.58.200. 87-22-100 (Order DE 87-39), § 173-19-370, filed 11/4/87; 84-08-003 (Order DE 84-10), § 173-19-370, filed 3/22/84; 83-07-082 (Order DE 83-5), § 173-19-370, filed 3/23/83; 82-18-027 (Order DE 82-33), § 173-19-370, filed 8/25/82; 81-24-075 (Order DE 81-38), § 173-19-370, filed 12/2/81; 81-20-004 (Order DE 81-25), § 173-19-370, filed 9/24/81; 81-01-040 (Order DE 80-51), § 173-19-370, filed 12/11/80; 80-13-030 (Order DE 80-35), § 173-19-370, filed 9/10/80. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-05-053 (Order DE 80-12), § 173-19-370, filed 4/16/80; 80-02-123 (Order DE 79-34), § 173-19-370, filed 1/30/80; 79-09-131 (Order DE 79-16), § 173-19-370, filed 9/5/79; 79-09-001 (Order DE 79-6), § 173-19-370, filed 8/2/79; Order DE 77-16, § 173-19-370, filed 9/9/77; Order DE 74-23, § 173-19-370, filed 12/30/74.]

WAC 173-19-420 Thurston County. Thurston County master program approved May 21, 1976. Revision approved August 27, 1976. Revision approved August 7, 1979. Revision approved September 23, 1981. Revision approved March 4, 1982. Revision approved August 30, 1984. Revision approved September 29, 1987. Revision approved May 15, 1990. Revision approved October 28, 1991. Revision approved July 25, 1995.

[Statutory Authority: Chapter 90.58 RCW. 95-16-048 (Order 94-39), § 173-19-420, filed 7/25/95, effective 8/25/95. Statutory Authority: RCW 90.58.200. 91-22-022 (Order 91-40), § 173-19-420, filed 10/29/91, effective 11/29/91; 90-11-072 (Order 89-63), § 173-19-420, filed 5/16/90, effective 6/16/90. Statutory Authority: RCW 90.58.120 and 90.58.200. 87-20-026 (Order DE 87-28), § 173-19-420, filed 9/30/87; 84-19-038 (Order DE 84-30), § 173-19-420, filed 9/14/84; 82-07-004 (Order DE 82-3), § 173-19-420, filed 3/4/82; 81-20-005 (Order DE 81-26), § 173-19-420, filed 9/24/81. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-420, filed 1/30/80; 79-11-019 (Order DE 79-19), § 173-19-420, filed 10/9/79; 79-09-001 (Order DE 79-6), § 173-19-420, filed 8/2/79; Order DE 77-16, § 173-19-420, filed 9/9/77; Order DE 74-23, § 173-19-420, filed 12/30/74.]

WAC 173-19-4205 Tumwater, city of. City of Tumwater master program approved May 21, 1976. Revision approved August 30, 1984. Revision approved September 29, 1987. Revision approved May 15, 1990. Revision approved October 2, 1990. Revision approved April 17, 1991. Revision approved April 21, 1991. Revision approved November 2, 1993. Revision approved May 3, 1994. Revision approved July 25, 1995.

[Statutory Authority: Chapter 90.58 RCW. 95-16-048 (Order 94-39), § 173-19-4205, filed 7/25/95, effective 8/25/95. Statutory Authority: RCW 90.58.200. 94-10-080 (Order 94-01), § 173-19-4205, filed 5/4/94, effective 6/4/94; 93-22-063 and 93-22-099 (Orders 93-21 and 93-21A), § 173-19-4205, filed 10/29/93 and 11/3/93, effective 11/29/93 and 12/4/93; 92-09-134 (Order 92-03), § 173-19-4205, filed 4/21/92, effective 5/22/92; 91-09-055 (Order 91-10), § 173-19-4205, filed 4/16/91, effective 5/17/91; 90-20-110 (Order 90-33), § 173-19-4205, filed 10/2/90, effective 11/2/90; 90-11-072 (Order 90-07), § 173-19-4205, filed 5/16/90, effective 6/16/90. Statutory Authority: RCW 90.58.120 and 90.58.200. 87-20-026 (Order DE 87-28), § 173-19-4205, filed 9/30/87; 84-19-038 (Order DE 84-30), § 173-19-4205, filed 9/14/84. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-4205, filed 1/30/80.]

Chapter 173-175 WAC
DAM SAFETY

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-175-700	Applicability to projects licensed or exempted by the Federal Energy Regulatory Commission (FERC). [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-700, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.
173-175-710	Coordination between the department and the Federal Energy Regulatory Commission (FERC). [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-710, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.
173-175-720	Construction or modification of FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-720, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.
173-175-730	Construction permit fee for FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-730, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.
173-175-740	Construction inspection of FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-740, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.
173-175-750	Construction records reporting for FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-750, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.
173-175-760	Exceptions to construction permit for FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

"Department" means the department of ecology.

"Design step level" means an integer value between one and eight used to designate increasingly stringent design loadings and conditions for design of critical project elements.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

"Project engineer" means a professional engineer licensed in Washington, having direct supervision, as defined

in WAC 196-24-095, in managing the engineering aspects of the project as representative of the owner.

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

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

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

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

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

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

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

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

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

WAC 173-175-070 Effective date. The effective date of Parts One through Five of this chapter shall be July 1, 1992.

[Statutory Authority: 1995 c 8. 95-22-030 (Order 94-15), § 173-175-070, filed 10/24/95, effective 11/24/95. Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-070, filed 12/16/92, effective 1/16/93; 92-12-055 (Order 91-17), § 173-175-070, filed 6/1/92, effective 7/2/92.]

WAC 173-175-390 Payment of construction permit fees. (1) The amount of the construction permit fee will be determined by the department based upon procedures contained in WAC 173-175-360 and 173-175-370 and information contained in the construction plans.

(a) An initial payment, which may represent all or a portion of the construction permit fee shall be paid in conjunction with the submittal of the construction permit application described in WAC 173-175-120. The amount of the initial payment shall be:

(i) Ten dollars for the removal of a dam with safety deficiencies as described in WAC 173-175-370(3); or

(ii) Five hundred dollars for construction of a new dam or modification of an existing dam or project.

(b) The balance of the fee amount (less the initial payment above) is to be paid following notification by the department of the balance due.

(c) All fees collected are nonrefundable.

(2) No fee shall be required for the review of conceptual plans which describe proposed repairs or improvements to existing dams to correct safety deficiencies. The normal construction permit process will apply at the time plans and specifications are submitted to the department.

(3) No additional fees shall be required for plan and specification changes and resubmittals required by the department as part of the review process.

(4) No additional fees shall be required for review of construction change orders.

[Statutory Authority: 1995 c 8. 95-22-030 (Order 94-15), § 173-175-390, filed 10/24/95, effective 11/24/95. Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-390, filed 12/16/92, effective 1/16/93; 92-12-055 (Order 91-17), § 173-175-390, filed 6/1/92, effective 7/2/92.]

WAC 173-175-700 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-710 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-720 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-730 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-740 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-750 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-760 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-770 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-780 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-790 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-800 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-810 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-175-820 Repealed. See Disposition Table at beginning of this chapter.

Chapter 173-204 WAC
SEDIMENT MANAGEMENT STANDARDS

WAC

WAC 173-204-100 Authority and purpose. (1) This chapter is promulgated under the authority of chapter 90.48 RCW, the Water Pollution Control Act; chapter 70.105D RCW, the Model Toxics Control Act; chapter 90.70 RCW, the Puget Sound Water Quality Authority Act; chapter 90.52 RCW, the Pollution Disclosure Act of 1971; chapter 90.54 RCW, the Water Resources Act of 1971; and chapter 43.21C RCW, the state Environmental Policy Act, to establish marine, low salinity and freshwater surface sediment management standards for the state of Washington.

(2) The purpose of this chapter is to reduce and ultimately eliminate adverse effects on biological resources and significant health threats to humans from surface sediment contamination by:

(a) Establishing standards for the quality of surface sediments;

(b) Applying these standards as the basis for management and reduction of pollutant discharges; and

(c) Providing a management and decision process for the cleanup of contaminated sediments.

(3) Part III, Sediment quality standards of this chapter provides chemical concentration criteria, biological effects criteria, human health criteria, and other toxic, radioactive, biological, or deleterious substances criteria which identify surface sediments that have no adverse effects, including no acute or chronic adverse effects on biological resources and no significant health risk to humans, as defined in this regulation. The sediment quality standards provide a regulatory and management goal for the quality of sediments throughout the state.

(4) The sediment criteria of WAC 173-204-320 through 173-204-340 shall constitute surface sediment quality standards and be used to establish an inventory of surface sediment sampling stations where the sediments samples taken from these stations are determined to pass or fail the applicable sediment quality standards.

(5) Part IV, Sediment source control standards of this chapter shall be used as a basis for controlling the effects of point and nonpoint source discharges to sediments through the National Pollutant Discharge Elimination System (NPDES) federal permit program, state water quality management permit programs, issuance of administrative orders or other means determined appropriate by the department. The source control standards establish discharge sediment monitoring requirements and criteria for establishment and maintenance of sediment impact zones.

(6) Part V, Sediment cleanup standards of this chapter establishes administrative procedural requirements and criteria to identify, screen, rank and prioritize, and cleanup contaminated surface sediment sites. The sediment cleanup standards of WAC 173-204-500 through 173-204-590 shall be used pursuant to authorities established under chapters 90.48 and 70.105D RCW.

(7) This chapter establishes and defines a goal of minor adverse effects as the maximum level of sediment contamination allowed in sediment impact zones under the provisions of Part IV, Sediment source control standards and as the cleanup screening levels for identification of sediment cleanup sites and as the minimum cleanup levels to be achieved in all cleanup actions under Part V, Sediment cleanup standards.

(8) Local ordinances establishing requirements for the designation and management of marine, low salinity and freshwater sediments shall not be less stringent than this chapter.

Note: All codes, standards, statutes, rules or regulations cited in this chapter are available for inspection at the Department of Ecology, P.O. Box 47703, Olympia, Washington 98504-7703.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-100, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-100, filed 3/27/91, effective 4/27/91.]

WAC 173-204-130 Administrative policies. The department shall implement this chapter in accordance with the following policies:

(1) The department shall seek to implement, and as necessary modify this chapter to protect biological resources and human health consistent with WAC 173-204-100(2). To implement the intent of this subsection, the department shall use methods that accurately reflect the latest scientific knowledge consistent with the definitions contained in WAC 173-204-200 (14) and (15), as applicable.

(2) At the interface between surface sediments, ground water or surface water, the applicable standards shall depend on which beneficial use is or could be adversely affected, as determined by the department. If beneficial uses of more than one resource are affected, the most restrictive standards shall apply.

(3) It shall be the goal of the department to modify this chapter so that methods such as confirmatory biological tests, sediment impact zone models, use of contaminated sediment site ranking models, etc., continue to accurately reflect the latest scientific knowledge as established through ongoing validation and refinement.

(4) Any person or the department may propose an alternate technical method to replace or enhance the application of a specific technical method required under this chapter. Using best professional judgment, the department shall provide advance review and approval of any alternate technical method proposed prior to its application. Application and use of alternate technical methods shall be allowed when the department determines that the technical merit of the resulting decisions will improve the department's ability

to implement and meet the intent of this chapter as described in WAC 173-204-100(2), and will remain consistent with the scientific intent of definitions contained in WAC 173-204-200 (14) and (15). The department shall maintain a record of the department's decisions concerning application for use of alternate technical methods pursuant to this subsection. The record shall be made available to the public on request.

(5) Intergovernmental coordination. The department shall ensure appropriate coordination and consultation with federally recognized Indian tribes and local, state, and federal agencies to provide information on and to implement this chapter.

(6) The department shall conduct an annual review of this chapter, and modify its provisions every three years, or as necessary. Revision to this chapter shall be made pursuant to the procedures established within chapter 34.05 RCW, the Administrative Procedure Act.

(7) Review of scientific information. When evaluating this chapter for necessary revisions, the factors the department shall consider include:

(a) New or additional scientific information which is available relating surface sediment chemical quality to acute or chronic adverse effects on biological resources as defined in WAC 173-204-200 (1) and (7);

(b) New or additional scientific information which is available relating human health risk to marine, low salinity, or freshwater surface sediment chemical contaminant levels;

(c) New or additional scientific information which is available relating levels of other toxic, radioactive, biological and deleterious substances in marine, low salinity, or freshwater sediments to acute or chronic adverse effects on biological resources, or to a significant health risk to humans;

(d) New state or federal laws which have established environmental or human health protection standards applicable to surface sediment; or

(e) Scientific information which has been identified for addition, modification or deletion by a scientific review process established by the department.

(8) Public involvement and education. The goal of the department shall be to provide timely information and meaningful opportunities for participation by the public in the annual review conducted by the department under subsection (6) of this section, and any modification of this chapter. To meet the intent of this subsection the department shall:

(a) Provide public notice of the department's decision regarding the results of its annual review of this chapter, including:

(i) The department's findings for the annual review factors identified in subsection (7) of this section;

(ii) The department's decision regarding the need for modification of this chapter based on its annual review; and

(iii) Identification of a time period for public opportunity to comment on the department's findings and decisions pursuant to this subsection.

(b) Provide public notice by mail or by additional procedures determined necessary by the department which may include:

(i) Newspaper publication;

(ii) Other news media;

(iii) Press releases;

(iv) Fact sheets;

(v) Publications;

(vi) Any other method as determined by the department.

(c) Conduct public meetings as determined necessary by the department to educate and inform the public regarding the department's annual review determinations and decisions.

(d) Comply with the rule making and public participation requirements of chapter 34.05 RCW, the Administrative Procedure Act, for any revisions to this chapter.

(9) Test sediments evaluated for compliance with the sediment quality standards of WAC 173-204-320 through 173-204-340 and/or the sediment impact zone maximum criteria of WAC 173-204-420 and/or the cleanup screening levels criteria of WAC 173-204-520 shall be sampled and analyzed using the Puget Sound Protocols or other methods approved by the department. Determinations made pursuant to this chapter shall be based on sediment chemical and/or biological data that were developed using an appropriate quality assurance/quality control program, as determined by the department.

(10) The statutory authority for decisions under this chapter shall be clearly stated in the decision documents prepared pursuant to this chapter. The department shall undertake enforcement actions consistent with the stated authority under which the action is taken. The process for judicial review of these decisions shall be pursuant to the statutes under which the action is being taken.

(11) When the department identifies this chapter as an applicable, or relevant and appropriate requirement for a federal cleanup action under the Comprehensive Environmental Response, Compensation and Liability Act, the department shall identify the entire contents of this chapter as the appropriate state requirement.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-130, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-130, filed 3/27/91, effective 4/27/91.]

WAC 173-204-200 Definitions. For the purpose of this chapter, the following definitions shall apply:

(1) "Acute" means measurements of biological effects using surface sediment bioassays conducted for time periods that are relatively short in comparison to the life cycle of the test organism. Acute effects may include mortality, larval abnormality, or other endpoints determined appropriate by the department.

(2) "Amphipod" means crustacean of the Class Amphipoda, e.g., Rhepoxynius abronius, Ampelisca abdita, or Eohaustorius estuarius.

(3) "Appropriate biological tests" means only tests designed to measure directly, or through established predictive capability, biologically significant adverse effects to the established or potential benthic or aquatic resources at a given location, as determined by rule by the department.

(4) "Beneficial uses" means uses of waters of the state which include but are not limited to use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power, and preservation of environmental and aesthetic values, and all other uses

compatible with the enjoyment of the public waters of the state.

(5) "Best management practices" or "BMPs" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of surface sediments of the state. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or water disposal, or drainage from raw material storage.

(6) "Bioassay" means a test procedure that measures the response of living plants, animals, or tissues to a sediment sample.

(7) "Chronic" means measurements of biological effects using sediment bioassays conducted for, or simulating, prolonged exposure periods of not less than one complete life cycle, evaluations of indigenous field organisms for long-term effects, assessment of biological effects resulting from bioaccumulation and biomagnification, and/or extrapolated values or methods for simulating effects from prolonged exposure periods. Chronic effects may include mortality, reduced growth, impaired reproduction, histopathological abnormalities, adverse effects to birds and mammals, or other endpoints determined appropriate by the department.

(8) "Contaminated sediment" means surface sediments designated under the procedures of WAC 173-204-310 as exceeding the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(9) "Control sediment sample" means a surface sediment sample which is relatively free of contamination and is physically and chemically characteristic of the area from which bioassay test animals are collected. Control sediment sample bioassays provide information concerning a test animal's tolerance for stress due to transportation, laboratory handling, and bioassay procedures. Control sediment samples cannot exceed the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

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

(11) "Freshwater sediments" means surface sediments in which the sediment pore water contains less than or equal to 0.5 parts per thousand salinity.

(12) "Low salinity sediments" means surface sediments in which the sediment pore water contains greater than 0.5 parts per thousand salinity and less than 25 parts per thousand salinity.

(13) "Marine finfish rearing facilities" shall mean those private and public facilities located within state waters where finfish are fed, nurtured, held, maintained, or reared to reach the size of release or for market sale.

(14) "Marine sediments" means surface sediments in which the sediment pore water contains 25 parts per thousand salinity or greater.

(15) "Minor adverse effects" means a level of effects that:

(a) Has been determined by rule by the department, except in cases subject to WAC 173-204-110(6); and

(b) Meets the following criteria:

(i) An acute or chronic adverse effect to biological resources as measured by a statistically and biologically significant response relative to reference in no more than one appropriate biological test as defined in WAC 173-204-200(3); or

(ii) A statistically and biologically significant response that is significantly elevated relative to reference in any appropriate biological test as defined in WAC 173-204-200(3); or

(iii) Biological effects per (b)(i) or (ii) of this subsection as predicted by exceedance of an appropriate chemical or other deleterious substance standard, except where the prediction is overridden by direct biological testing evidence pursuant to (b)(i) and (ii) of this subsection; and

(c) Does not result in significant human health risk as predicted by exceedance of an appropriate chemical, biological, or other deleterious substance standard.

(16) "No adverse effects" means a level of effects that:

(a) Has been determined by rule by the department, except in cases subject to WAC 173-204-110(6); and

(b) Meets the following biological criteria:

(i) No acute or chronic adverse effects to biological resources as measured by a statistically and biologically significant response relative to reference in any appropriate biological test as defined in WAC 173-204-200(3); and

(ii) No acute or chronic adverse biological effect per (b)(i) of this subsection as predicted by exceedance of an appropriate chemical or other deleterious substance standard, except where the prediction is overridden by direct biological testing evidence pursuant to (b)(i) of this subsection; and

(iii) Does not result in significant human health risk as predicted by exceedance of an appropriate chemical, biological, or other deleterious substance standard.

(17) "Other toxic, radioactive, biological, or deleterious substances" means contaminants which are not specifically identified in the sediment quality standards chemical criteria of WAC 173-204-320 through 173-204-340 (e.g., organic debris, tributyltin, DDT, etc.).

(18) "Person" means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, industry, private corporation, port district, special purpose district, irrigation district, unit of local government, state government agency, federal government agency, Indian tribe, or any other entity whatsoever.

(19) "Practicable" means able to be completed in consideration of environmental effects, technical feasibility and cost.

(20) "Puget Sound basin" or "Puget Sound" means:

(a) Puget Sound south of Admiralty Inlet, including Hood Canal and Saratoga Passage;

(b) The waters north to the Canadian border, including portions of the Strait of Georgia;

(c) The Strait of Juan de Fuca south of the Canadian border; and

(d) All the lands draining into these waters as mapped in water resources inventory areas numbers 1 through 19, set forth in water resources management program established pursuant to the Water Resources Act of 1971, chapter 173-500 WAC.

(21) "Puget Sound protocols" means *Puget Sound Estuary Program. 1986. As amended. Recommended Protocols for Measuring Selected Environmental Variables in Puget Sound, U.S. Environmental Protection Agency, Region 10, Seattle, WA (looseleaf).*

(22) "Reference sediment sample" means a surface sediment sample which serves as a laboratory indicator of a test animal's tolerance to important natural physical and

chemical characteristics of the sediment, e.g., grain size, organic content. Reference sediment samples represent the nonanthropogenically affected background surface sediment quality of the sediment sample. Reference sediment samples cannot exceed the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(23) "Sediment impact zone" means an area where the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 are exceeded due to ongoing permitted or otherwise authorized wastewater, storm water, or nonpoint source discharges and authorized by the department within a federal or state wastewater or storm water discharge permit, or other formal department authorization.

(24) "Sediment recovery zone" means an area where the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 are exceeded as a result of historical discharge activities, and authorized by the department as a result of a cleanup decision made pursuant to WAC 173-204-580, Cleanup action decision.

(25) "Site units" means discrete subdivisions of an individual contaminated sediment site that are being evaluated for the purpose of establishing cleanup standards. Site units are based on consideration of unique locational, environmental, spatial, or other conditions determined appropriate by the department, e.g., cleanup under piers, cleanup in eelgrass beds, cleanup in navigational lanes.

(26) "Surface sediments" or "sediment(s)" means settled particulate matter located in the predominant biologically active aquatic zone, or exposed to the water column. Sediment(s) also includes settled particulate matter exposed by human activity (e.g., dredging) to the biologically active aquatic zone or to the water column.

(27) "Test sediment" means a sediment sample that is evaluated for compliance with the sediment quality standards of WAC 173-204-320 through 173-204-340 and/or the sediment impact zone maximum criteria of WAC 173-240-420 and/or the cleanup screening levels criteria of WAC 173-204-520.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-200, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-200, filed 3/27/91, effective 4/27/91.]

WAC 173-204-315 Confirmatory marine sediment biological tests. (1) The following five acute and chronic effects biological tests shall be used to confirm designation of Puget Sound marine sediments using the procedures described in WAC 173-204-310(2). Use of alternate biological tests shall be subject to the review and approval of the department using the procedures of WAC 173-204-130(4).

(a) Acute effects tests.

(i) Amphipod: Ten-day mortality sediment bioassay for the Amphipod, i.e., Rhepoxynius abronius, Ampelisca abdita, or Eohaustorius estuarius.

(ii) Larval: Any one of the following mortality/abnormality sediment bioassays:

(A) Crassostrea gigas, i.e., Pacific oyster;

(B) Mytilus (edulis) galloprovincialis, i.e., Blue mussel;

(C) Strongylocentrotus purpuratus, i.e., Purple sea urchin;

(D) Strongylocentrotus droebachiensis, i.e., Green sea urchin; or

(E) Dendraster excentricus, i.e., Sand dollar.

(b) Chronic effects tests.

(i) Benthic infaunal abundance: Abundance of the following major taxa: Class Crustacea, Class Polychaeta, and Phylum Mollusca.

(ii) Juvenile polychaete: Twenty-day growth rate of the juvenile polychaete Neanthes arenaceodentata; or

(iii) Microtox saline extract: Decreased luminescence from the bacteria Vibrio fisheri after a fifteen minute exposure.

(2) Performance standards for control and reference sediment biological test results. The biological tests of this section shall not be considered valid unless test results for the appropriate control and reference sediments meet the performance standards of (a) through (e) of this subsection. The department may reject the results of a reference sediment biological test based on unacceptably high variability.

(a) Amphipod: The control sediment shall have less than ten percent mortality over the test period. The reference sediment shall have less than twenty-five percent mortality.

(b) Larval: The seawater control sample shall have less than thirty percent combined abnormality and mortality (i.e., a seventy percent normal survivorship at time-final).

(c) Benthic abundance: The reference benthic macroinvertebrate assemblage shall be representative of areas of Puget Sound removed from significant sources of contaminants, and to the extent possible shall have the following characteristics:

(i) The taxonomic richness of benthic macroinvertebrates and the abundances of higher taxonomic groups shall reflect seasonality and natural physical-chemical conditions (e.g., grain size composition and salinity of sediments, water depth) in a reference area, and not be obviously depressed as a result of chemical toxicity;

(ii) Normally abundant species that are known to be sensitive to chemical contaminants shall be present;

(iii) Normally rare species that are known to become abundant only under chemically disturbed conditions shall be rare or absent; and

(iv) The abundances of normally rare species that control community structure through physical modification of the sediment shall be similar to those observed at the test sediment site.

(d) Juvenile polychaete: The control sediment shall have less than ten percent mortality and mean individual growth of $\geq$ 0.72 mg/ind/day per dry weight basis. The reference sediment shall have a mean individual growth rate which is at least eighty percent of the mean individual growth rate found in the control sediment. Control sediments exhibiting growth below 0.72 mg/ind/day may be approved by the department on a case-by-case basis.

(e) Microtox: Reserved: The department shall determine performance standards on a case-by-case basis as necessary to meet the intent of this chapter.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-315, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-315, filed 3/27/91, effective 4/27/91.]

WAC 173-204-320 Marine sediment quality standards. (1) Goal and applicability.

(a) The sediment quality standards of this section shall correspond to a sediment quality that will result in no adverse effects, including no acute or chronic adverse effects on biological resources and no significant health risk to humans.

(b) The marine sediment quality standards of this section shall apply to marine sediments located within Puget Sound as defined in WAC 173-204-200(19).

(c) Non-Puget Sound marine sediment quality standards. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(2) Chemical concentration criteria. The chemical concentrations in Table I establish the marine sediment quality standards chemical criteria for designation of sediments.

(a) Where laboratory analysis indicates a chemical is not detected in a sediment sample, the detection limit shall be reported and shall be at or below the Marine Sediment Quality Standards chemical criteria value set in this table.

(b) Where chemical criteria in this table represent the sum of individual compounds or isomers, the following methods shall be applied:

(i) Where chemical analyses identify an undetected value for every individual compound/isomer then the single highest detection limit shall represent the sum of the respective compounds/isomers; and

(ii) Where chemical analyses detect one or more individual compound/isomers, only the detected concentrations will be added to represent the group sum.

(c) The listed chemical parameter criteria represent concentrations in parts per million, "normalized," or expressed, on a total organic carbon basis. To normalize to total organic carbon, the dry weight concentration for each parameter is divided by the decimal fraction representing the percent total organic carbon content of the sediment.

(d) The LPAH criterion represents the sum of the following "low molecular weight polynuclear aromatic hydrocarbon" compounds: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, and Anthracene. The LPAH criterion is not the sum of the criteria values for the individual LPAH compounds as listed.

(e) The HPAH criterion represents the sum of the following "high molecular weight polynuclear aromatic hydrocarbon" compounds: Fluoranthene, Pyrene, Benz(a)anthracene, Chrysene, Total Benzofluoranthenes, Benzo(a)pyrene, Indeno(1,2,3,-c,d)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene. The HPAH criterion is not the sum of the criteria values for the individual HPAH compounds as listed.

(f) The TOTAL BENZOFLUORANTHENES criterion represents the sum of the concentrations of the "B," "J," and "K" isomers.

Table I

Marine Sediment Quality Standards
—Chemical Criteria

CHEMICAL PARAMETER	MG/KG DRY WEIGHT (PARTS PER MILLION (PPM) DRY)
ARSENIC	57
CADMIUM	5.1
CHROMIUM	260
COPPER	390
LEAD	450
MERCURY	0.41
SILVER	6.1
ZINC	410
CHEMICAL PARAMETER	**MG/KG ORGANIC CARBON (PPM CARBON)**
LPAH	370
NAPHTHALENE	99
ACENAPHTHYLENE	66
ACENAPHTHENE	16
FLUORENE	23
PHENANTHRENE	100
ANTHRACENE	220
2-METHYLNAPHTHALENE	38
HPAH	960
FLUORANTHENE	160
PYRENE	1000
BENZ(A)ANTHRACENE	110
CHRYSENE	110
TOTAL BENZOFLUORANTHENES	230
BENZO(A)PYRENE	99
INDENO (1,2,3,-C,D) PYRENE	34
DIBENZO (A,H) ANTHRACENE	12
BENZO(G,H,I)PERYLENE	31
1,2-DICHLOROBENZENE	2.3
1,4-DICHLOROBENZENE	3.1
1,2,4-TRICHLOROBENZENE	0.81
HEXACHLOROBENZENE	0.38
DIMETHYL PHTHALATE	53
DIETHYL PHTHALATE	61
DI-N-BUTYL PHTHALATE	220
BUTYL BENZYL PHTHALATE	4.9
BIS (2-ETHYLHEXYL) PHTHALATE	47
DI-N-OCTYL PHTHALATE	58
DIBENZOFURAN	15
HEXACHLOROBUTADIENE	3.9
N-NITROSODIPHENYLAMINE	11
TOTAL PCB'S	12
CHEMICAL PARAMETER	**UG/KG DRY WEIGHT (PARTS PER BILLION (PPB) DRY)**
PHENOL	420
2-METHYLPHENOL	63
4-METHYLPHENOL	670
2,4-DIMETHYL PHENOL	29
PENTACHLOROPHENOL	360
BENZYL ALCOHOL	57
BENZOIC ACID	650

(3) Biological effects criteria. For designation of sediments pursuant to WAC 173-204-310(2), sediments are determined to have adverse effects on biological resources when any one of the confirmatory marine sediment biological tests of WAC 173-204-315(1) demonstrate the following results:

(a) Amphipod: The test sediment has a higher (statistically significant, t test, $p \leq 0.05$) mean mortality than the reference sediment and the test sediment mean mortality exceeds twenty-five percent, on an absolute basis.

(b) Larval: The test sediment has a mean survivorship of normal larvae that is less (statistically significant, t test,

$p \leq 0.05$) than the mean normal survivorship in the reference sediment and the test sediment mean normal survivorship is less than eighty-five percent of the mean normal survivorship in the reference sediment (i.e., the test sediment has a mean combined abnormality and mortality that is greater than fifteen percent relative to time-final in the reference sediment).

(c) Benthic abundance: The test sediment has less than fifty percent of the reference sediment mean abundance of any one of the following major taxa: Class Crustacea, Phylum Mollusca or Class Polychaeta, and the test sediment abundance is statistically different (t test, $p \leq 0.05$) from the reference sediment abundance.

(d) Juvenile polychaete: The test sediment has a mean individual growth rate of less than seventy percent of the reference sediment mean individual growth rate and the test sediment mean individual growth rate is statistically different (t test, $p \leq 0.05$) from the reference sediment mean individual growth rate.

(e) Microtox: The mean light output of the highest concentration of the test sediment is less than eighty percent of the mean light output of the reference sediment, and the two means are statistically different from each other (t test, $p \leq 0.05$).

(4) Marine sediment human health criteria. Reserved: The department may determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(5) Marine sediment other toxic, radioactive, biological, or deleterious substances criteria. Other toxic, radioactive, biological or deleterious substances in, or on, sediments shall be at or below levels which cause no adverse effects in marine biological resources, and below levels which correspond to a significant health risk to humans, as determined by the department. The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter pursuant to WAC 173-204-310(3).

(6) Nonanthropogenically affected sediment quality criteria. Whenever the nonanthropogenically affected sediment quality is of a lower quality (i.e., higher chemical concentrations, higher levels of adverse biological response, or posing a greater health threat to humans) than the applicable sediment quality standards assigned for said sediments by this chapter, the existing sediment chemical and biological quality shall be identified on an area-wide basis as determined by the department, and used in place of the sediment quality standards of WAC 173-204-320.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-320, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-320, filed 3/27/91, effective 4/27/91.]

WAC 173-204-400 General considerations. (1) The standards of WAC 173-204-400 through 173-204-420 specify a process for managing sources of sediment contamination. These procedures include:

(a) Evaluating the potential for a waste discharge to create a sediment impact;

(b) Requiring application for a sediment impact zone authorization;

(c) Verifying whether a discharge has received all known, available and reasonable methods of prevention, control, and treatment prior to discharge, and/or application of best management practices;

(d) Analysis and verification of the potential sediment impact;

(e) Determining whether the sediment impact zone would meet maximum allowable contamination requirements;

(f) Evaluating the proposed sediment impact zone in consideration of locational criteria;

(g) Design and/or constrain the sediment impact zone to be as small, and with the least contamination, as practicable;

(h) Public review of the proposed sediment impact zone authorization;

(i) Issuance of the sediment impact zone authorization with provisions for maintenance and closure; and

(j) Reducing and eventually eliminating the sediment impact zone via renewals and modifications of a sediment impact zone authorization.

(2) Permits and other authorizations of wastewater, storm water, and nonpoint source discharges to surface waters of the state of Washington under authority of chapter 90.48 RCW shall be conditioned so that the discharge receives all known, available and reasonable methods of prevention, control, and treatment, and best management practices prior to discharge, as required by chapters 90.48, 90.52, and 90.54 RCW. The department shall provide consistent guidance on the collection, analysis and evaluation of wastewater, receiving-water, and sediment samples to meet the intent of this section using consideration of pertinent sections of the *Department of Ecology Permit Writers' Manual,* as amended, and other guidance approved by the department.

(3) As determined necessary, the department shall require any person who proposes a new discharge to evaluate the potential for the proposed discharge to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(4) As determined necessary, the department shall require existing permitted discharges to evaluate the potential for the permitted discharge to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(5) Within permits authorizing existing discharges to surface waters of the state of Washington, the department may specify appropriate locations and methodologies for the collection and analysis of representative samples of wastewater, receiving-water, and sediments to evaluate the potential for the discharge to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(6) In establishing the need for, and the appropriate, individual permit monitoring conditions, the department shall consider multiple factors relating to the potential for a discharge to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 including but not limited to:

(a) Discharge particulate characteristics;

(b) Discharge contaminant concentrations, flow, and loading rate;

(c) Sediment chemical concentration and biological effects levels;

(d) Receiving water characteristics;

(e) The geomorphology of sediments;

(f) Cost mitigating factors such as the available resources of the discharger; and

(g) Other factors determined necessary by the department.

(7) As determined necessary to ensure the wastewater discharge does not cause a violation of the applicable standards of WAC 173-204-320 through 173-204-340, except as authorized by the department under WAC 173-204-415, Sediment impact zones, the department shall stipulate permit terms and conditions which include wastewater discharge average and maximum mass loading per unit time, and wastewater discharge average and maximum chemical concentrations within new and existing facility permits authorizing wastewater discharges to surface waters of the state of Washington.

(8) As determined necessary, the department shall modify wastewater discharge permits whenever it appears the discharge causes a violation, or creates a substantial potential to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, as authorized by RCW 90.48.520.

(9) To meet the intent of this section, the sediment quality standards of WAC 173-204-320 through 173-204-340 and the sediment impact zone standards of WAC 173-204-415 through 173-204-420 are not considered to be federal discharge permit effluent limits subject to antibacksliding requirements of the federal Clean Water Act. Discharge permit sediment monitoring and sediment impact zone compliance requirements may be used to establish effluent limits sufficient to meet the standards of this chapter.

(10) As determined necessary, the department shall use issuance of administrative actions under authority of chapters 90.48 or 70.105D RCW to implement this chapter.

(11) Wastewater dilution zones. Water quality mixing zones authorized by the department pursuant to chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington, do not satisfy the standards of WAC 173-204-415, Sediment impact zones.

(12) For the sediment source control standards of WAC 173-204-400 through 173-204-420, any and all references to violation of, potential to violate, exceedance of, or potential to exceed the applicable standards of WAC 173-204-320 through 173-204-340 shall also apply to the antidegradation and designated use policies of WAC 173-204-120. Any exceedances or potential exceedances of the antidegradation or designated use policies of WAC 173-204-120 shall meet the applicable requirements of WAC 173-204-400 through 173-204-420.

(13) Under no circumstances shall the provisions of sediment source control standards WAC 173-204-400 through 173-204-420 be construed as providing for the relaxation of discharge permit requirements under other authorities including, but not limited to, chapter 90.48 RCW, the Water Pollution Control Act, chapter 90.54 RCW, the Water Resources Act of 1971, and the Federal Water Pollution Control Act of 1972 and amendments.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-400, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-400, filed 3/27/91, effective 4/27/91.]

WAC 173-204-410 Sediment quality goal and sediment impact zone applicability. (1) Goal and policies.

(a) It is the established goal of the department to manage source control activities to reduce and ultimately eliminate adverse effects on biological resources and significant health threats to humans from sediment contamination.

(b) The stated policy of the department shall be to only authorize sediment impact zones so as to minimize the number, size, and adverse effects of all zones, with the intent to eliminate the existence of all such zones whenever practicable. The department shall consider the relationship between environmental effects, technical feasibility and cost in determining whether it is practicable to minimize and/or eliminate sediment impact zones.

(c) The department shall implement the standards of WAC 173-204-400 through 173-204-420 so as to prevent the creation of new contaminated sediment cleanup sites identified under WAC 173-204-530(4).

(2) A sediment impact zone authorization issued by the department under the authority of chapter 90.48 RCW does not constitute authorization to trespass on lands not owned by the applicant. These standards do not address and in no way alter the legal rights, responsibilities, or liabilities of the permittee or landowner of the sediment impact zone for any applicable requirements of proprietary, real estate, tort, and/or other laws not directly expressed as a requirement of this chapter.

(3) Except as identified in subsection (6)(d) of this section, any person may apply for a sediment impact zone under the following conditions:

(a) The person's discharge is provided with all known, available and reasonable methods of prevention, control, and treatment, and meets best management practices as stipulated by the department; and

(b) The person's discharge activity exposes or resuspends sediments which exceed, or otherwise cause or potentially cause sediments to exceed the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, or the antidegradation policy standards of WAC 173-204-120 (1)(a) and (c) within a period of ten years from the later date of either the department's formal approval of the application for a sediment impact zone authorization or the starting date of the discharge.

(4) The department shall only authorize sediment impact zones for permitted wastewater and storm water discharges, and other discharges authorized by the department. The department shall authorize all sediment impact zones via discharge permits or other formal administrative actions.

(5) The department shall not limit the application, establishment, maintenance, or closure of an authorized sediment impact zone via consideration of sediment contamination determined by the department to be the result of unknown, unpermitted or historic discharge sources.

(6) As determined necessary by the department, any person with a permitted discharge shall be required to meet the standards of WAC 173-204-400 through 173-204-420, as follows:

(a) Any person with a new or existing permitted wastewater discharge shall be required to meet the standards of WAC 173-204-400 through 173-204-420;

(b) Any person with a new or existing permitted industrial storm water discharge, regulated as process wastewater in National Pollutant Discharge Elimination System or state discharge permits, shall be required to meet the standards of WAC 173-204-400 through 173-204-420;

(c) Any person with a new or existing permitted storm water or nonpoint source discharge, which fully uses all known, available and reasonable methods of prevention, control, and treatment, and best management practices as stipulated by the department at the time of the person's application for a sediment impact zone, shall be required to meet the standards of WAC 173-204-400 through 173-204-420;

(d) Any person with a storm water discharge, existing prior to the adoption of this chapter, and determined by the department to not be fully using best management practices stipulated by the department at the time of the person's application for a permit from the department, shall be eligible for a sediment impact zone as follows:

(i) The department shall issue sediment impact zone authorizations with requirements for application of best management practices stipulated by the department on an approved time schedule.

(ii) Sediment impact zones authorized by the department for permitted storm water discharges under the applicability provisions of subsection (6)(d) of this section shall be subject to cleanup action determinations made by the department pursuant to WAC 173-204-500 through 173-204-590 when the sediment impact zone maximum criteria of WAC 173-204-420 are exceeded within the authorized sediment impact zone.

(iii) The department shall identify and include best management practices required to meet the sediment impact zone design standards of WAC 173-204-415(4) as soon as practicable within sediment impact zone authorizations established for storm water discharges per WAC 173-204-410 (6)(d).

(7) Dredged material and fill discharge activities subject to authorization under Section 401 of the federal Clean Water Act via chapter 90.48 RCW and chapter 173-225 WAC, establishment of implementation procedures of application for certification, are not subject to the standards of WAC 173-204-415 but are subject to the standards of WAC 173-204-400 through 173-204-410 and 173-204-420 as follows:

(a) Requirements for dredging activities and disposal sites shall be established by the department using best available dredged material management guidelines and applicable federal and state rules. These guidelines shall include the Puget Sound dredged disposal analysis (PSDDA) dredged material testing and disposal requirements cited in:

(i) *Management Plan Report - Unconfined Open-Water Disposal Of Dredged Material, Phase I, (Central Puget Sound), June 1988, or as amended;*

(ii) *Management Plan Report - Unconfined Open-Water Disposal Of Dredged Material, Phase II, (North And South Puget Sound), September 1989, or as amended;* and

(iii) *Users Manual For Dredged Material Management In Puget Sound, November 1990, or as amended.*

(b) In coordination with other applicable federal and state and local dredged material management programs, the department may issue administrative orders to establish approved disposal sites, to specify disposal site use conditions, and to specify disposal site monitoring requirements.

(c) The department may authorize sediment impact zones for dredged material disposal via federal Clean Water Act Section 401 certification actions.

(d) As determined necessary by the department, the department may authorize sediment impact zones for dredged material disposal via administrative orders issued under authority of chapter 90.48 RCW. The department shall authorize sediment impact zones for all Puget Sound dredged disposal analysis disposal sites via administrative orders issued under authority of chapter 90.48 RCW.

(e) Administrative orders and certifications establishing sediment impact zones for dredged material disposal sites shall describe establishment, maintenance, and closure requirements for the authorized site, consistent with the requirements described in (a) of this subsection.

(8) The source control standards of WAC 173-204-400 through 173-204-420 are applicable in cases where the sediment quality standards of WAC 173-204-320 through 173-204-340 are reserved.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-410, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-410, filed 3/27/91, effective 4/27/91.]

WAC 173-204-412 Marine finfish rearing facilities. (1) Purpose. This section sets forth the applicability of this chapter to marine finfish rearing facilities only. This section also identifies marine finfish rearing facility siting, operation, closure and monitoring requirements to meet the intent of this chapter, as applicable.

(2) Applicability. Marine finfish rearing facilities and their associated discharges are not subject to the authority and purpose standards of WAC 173-204-100 (3) and (7), and the marine sediment quality standards of WAC 173-204-320 and the sediment impact zone maximum criteria of WAC 173-204-420, within and including the distance of one hundred feet from the outer edge of the marine finfish rearing facility structure. Marine finfish rearing facilities are not subject to the sediment impact zone standards of WAC 173-204-415.

(3) Sediment monitoring. Sediment quality compliance and monitoring requirements for marine finfish rearing facilities shall be addressed through National Pollutant Discharge Elimination System or other permits issued by the department for facility operation. Marine finfish rearing facilities shall meet the following sediment quality monitoring requirements:

(a) Any person with a new facility shall identify a baseline sediment quality prior to facility operation for benthic infaunal abundance, total organic carbon and grain size in the location of the proposed operation and downcurrent areas that may be potentially impacted by the facility discharge;

(b) Any person with an existing operating facility shall monitor sediment quality for total organic carbon levels and identify the location of any sediments in the area of the facility statistically different (t test, $p \leq 0.05$) from the total organic carbon levels identified as facility baseline levels or statistically different from the applicable total organic carbon levels as identified in Table 1:

TABLE 1 - Puget Sound Reference Total Organic Carbon Values

Silt-Clay Particles (percent Dry Weight)	Total Organic Carbon (percent Dry Weight)
0-20	0.5
20-50	1.7
50-80	3.2
80-100	2.6

(c) The locations and frequency of monitoring for total organic carbon, benthic infaunal abundance and other parameters shall be determined by the department and identified in the applicable National Pollutant Discharge Elimination System permit;

(d) Antibacterials. Reserved: The department shall determine on a case-by-case basis the methods, procedure, locations, and frequency for monitoring antibacterials associated with the discharge from a marine finfish rearing facility;

(e) Closure. All permitted marine finfish rearing facilities shall monitor sediments impacted during facility operation to document recovery of sediment quality to background levels. The department shall determine on a case-by-case basis the methods, procedure, locations, and frequency for monitoring sediments after facility closure.

(4) Sediment impact zones. Marine finfish rearing facilities and their associated discharges that are permitted under a National Pollutant Discharge Elimination System permit are hereby provided a sediment impact zone by rule for any sediment quality impacts and biological effects within and including the distance of one hundred feet from the outer edge of the marine finfish rearing facility structure.

(a) The department may authorize an individual marine finfish rearing facility sediment impact zone for any sediments beyond a distance of one hundred feet from the facility perimeter via National Pollutant Discharge Elimination System permits or administrative actions. The authorized sediment impact zone shall meet the benthic infaunal abundance requirements of the sediment impact zone maximum criteria, WAC 173-204-420 (3)(c)(iii). Marine finfish rearing facilities that exceed the sediment quality conditions of subsection (3)(b) of this section beyond a distance of one hundred feet from the facility perimeter shall:

(i) Begin an enhanced sediment quality monitoring program to include benthic infaunal abundance consistent with the requirements of the National Pollutant Discharge Elimination System permit. The sediment quality monitoring program shall include a benthic infaunal abundance reference sediment sample as required in subsection (3)(a) of this section or a benthic infaunal abundance reference sediment sample in compliance with WAC 173-204-200(21); and

(ii) Be consistent with the sediment source control general considerations of WAC 173-204-400 and the sediment quality goal and sediment impact zone applicability requirements of WAC 173-204-410, apply for a sediment impact zone as determined necessary by the department.

(b) Administrative orders or permits establishing sediment impact zones for marine finfish rearing facilities shall describe establishment, maintenance, and closure requirements as determined necessary by the department.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-412, filed 12/29/95, effective 1/29/96.]

WAC 173-204-415 Sediment impact zones. The purpose of this section is to set forth the standards for establishment, maintenance, and closure of sediment impact zones to meet the intent of sediment quality dilution zones authorized pursuant to RCW 90.48.520, except for sediment impact zones authorized under WAC 173-204-410(7). The department shall authorize all sediment impact zones via discharge permits or other formal administrative actions.

(1) General requirements. Authorization, modification and renewal of a sediment impact zone by the department shall require compliance with the following general requirements:

(a) Permits authorizing wastewater discharges to surface waters of the state of Washington under authority of chapter 90.48 RCW shall be conditioned so that the discharge receives:

(i) All known, available and reasonable methods of prevention, control, and treatment prior to discharge, as required by chapters 90.48, 90.52, and 90.54 RCW; and

(ii) Best management practices as stipulated by the department.

(b) The maximum area, and maximum chemical contaminant concentration and/or allowable maximum biological effect level within sediments assigned to a sediment impact zone shall be as authorized by the department, in accordance with the standards of this section.

(c) The department shall determine that the person's activity generating effluent discharges which require authorization of a sediment impact zone is in the public interest.

(d) The department shall determine that any person's activity generating effluent discharges which require authorization of a sediment impact zone has adequately addressed alternative waste reduction, recycling, and disposal options through application of all known, available and reasonable methods of prevention, control, and treatment to minimize as best practicable the volume and concentration of waste contaminants in the discharge.

(e) The area boundaries of the sediment impact zone established by the department shall include the minimum practicable surface area, not to exceed the surface area allowed under subsection (4) of this section.

(f) Adverse effects to biological resources within an authorized sediment impact zone shall be maintained at the minimum chemical contamination and biological effects levels practicable at all times. The department shall consider the relationship between environmental effects, technical feasibility and cost in determining the minimum practicable chemical contamination and biological effects levels. Adverse effects to biological resources within an authorized

sediment impact zone shall not exceed a minor adverse effects level as a result of the discharge, as determined by the procedures of subsection (4) of this section.

(g) The operational terms and conditions for the sediment impact zone shall be maintained at all times.

(h) Final closure of the sediment impact zone shall be conducted in strict accordance with the department's sediment impact zone authorization.

(i) Documents authorizing a sediment impact zone shall require that the permitted discharge not result in a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, outside the area limits of the established zone.

(j) All applications to the department for sediment impact zone authorizations shall be subject to public notice, comment and hearing procedures defined but not limited to the applicable discharge permit or other formal administrative action requirements of chapter 43.21C RCW, the State Environmental Policy Act, chapter 197-11 WAC, SEPA rules, chapter 90.48 RCW, chapter 163-216 WAC, the State waste discharge permit program, and chapter 173-220 WAC, National Pollutant Discharge Elimination System Permit Program prior to issuance of the authorization. In determining the need for, location, and/or design of any sediment impact zone authorization, the department shall give consideration to all comments received during public review of the proposed sediment impact zone application.

(2) Application requirements.

(a) Whenever, in the opinion of the department, as a result of an ongoing or proposed effluent discharge, a person violates, shall violate, or creates a substantial potential to violate the sediment quality standards of WAC 173-204-320 through 173-204-340 as applicable within a period of ten years from the later date of either the department's evaluation of the ongoing discharge or the starting date of the proposed discharge, the department may require application for a sediment impact zone authorization under authority of chapter 90.48 RCW.

(b) Any person with a proposed or permitted effluent discharge shall apply to the department for authorization of a sediment impact zone when:

(i) The department requires the sediment impact zone application by written notification; or

(ii) The person independently identifies that the ongoing or proposed effluent discharge violates, shall violate, or creates a substantial potential to violate the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 within a period of ten years from the later date of the person's evaluation of the ongoing discharge or the starting date of the proposed discharge, using the procedures of this section.

(c) As necessary, the department may require any person to submit a sediment impact zone application in multiple steps concurrent with its ongoing review and determination concerning the adequacy of the application. The application shall provide the sediment impact zone design information required in subsection (4) of this section and other such information the department determines necessary. The application shall also provide the legal location and landowner(s) of property proposed for use as, or potentially affected by, a sediment impact zone, and shall be accompanied by such other relevant information as the department may require. The department shall issue a written approval of the complete sediment impact zone application prior to or concurrent with authorizing a sediment impact zone.

(d) Submittal of an application to the department for authorization of a sediment impact zone under the terms and conditions of this section shall establish the applicant's interim compliance with requirements of chapter 90.48 RCW and this chapter, as determined by the department. The department may authorize an interim compliance period within a valid discharge permit or administrative order to ensure ultimate compliance with chapter 90.48 RCW and this chapter. The interim compliance period shall not continue beyond the date of issuance of a sediment impact zone authorization within a valid discharge permit issued by the department.

(e) Prior to authorization, the department shall make a reasonable effort to identify and notify all landowners, adjacent landowners, and lessees affected by the proposed sediment impact zone. The department shall issue a sediment impact zone notification letter to any person it believes to be a potentially affected landowner and other parties determined appropriate by the department. The notification letter shall be sent by certified mail, return receipt requested, or by personal service. The notification letter shall provide:

(i) The name of the person the department believes to be the affected landowner;

(ii) The names and addresses of other affected landowners to whom the department has sent a proposed sediment impact zone notification letter;

(iii) The name and address of the sediment impact zone applicant;

(iv) A general description of the location, size, and contamination level proposed for the sediment impact zone;

(v) The intention of the department to release all specific sediment impact zone application information to the public upon written request to the department;

(vi) The determination of the department concerning whether the proposed sediment impact zone application meets the standards of this section;

(vii) The intention of the department whether to authorize the proposed sediment impact zone; and

(viii) Notification that the affected landowners, adjacent landowners, and lessees may comment on the proposed sediment impact zone. Any comments on the proposed sediment impact zone authorization shall be submitted in writing to the department within thirty days from the date of receipt of the notification letter, unless the department provides an extension.

(f) Prior to authorization, the department shall issue a sediment impact zone notification letter to affected port districts, the Washington state department of natural resources marine lands division, the U.S. Army Corps of Engineers, and other parties determined appropriate by the department. The notification letter shall be sent by certified mail, return receipt requested, or by personal service. The notification letter shall provide the information required under (e) of this subsection.

(3) Locational considerations. The department shall require any person applying for a sediment impact zone to

submit information concerning potential location considerations of the zone. The location of an authorized sediment impact zone shall avoid whenever possible and minimize adverse impacts to areas of special importance. Prior to authorization of a sediment impact zone, the department shall consider all pertinent information from the applicant, all affected parties, local, state and federal agencies, federally recognized Indian tribes, and the public concerning locational considerations, including but not limited to:

(a) Spawning areas;

(b) Nursery areas;

(c) Waterfowl feeding areas;

(d) Shellfish harvest areas;

(e) Areas used by species of economic importance;

(f) Tribal areas of significance;

(g) Areas determined to be ecologically unique;

(h) Water supply intake areas;

(i) Areas used for primary contact public recreation;

(j) High quality waters that constitute an outstanding national resource; and

(k) Areas where sediment quality is substantially better than levels necessary for protection of biological resources and human health.

(4) Design requirements. The location, areal limitations, and degree of effects allowed within an authorized sediment impact zone shall be determined by application of the department's sediment impact zone computer models "CORMIX," "PLUMES," and/or "WASP," or an alternate sediment impact zone model(s) approved by the department under WAC 173-204-130(4), as limited by the standards of this section and the department's best professional judgment. The models shall be used by the department or by the discharger as required by the department, to estimate the impact of any person's wastewater or storm water discharge on the receiving water and sediment quality for a period of ten years from the later date of either the department's formal approval of the application for a sediment impact zone authorization or the starting date of the discharge.

(a) Data requirements. The discharger shall submit the following information to determine requirements for establishment and authorization of a sediment impact zone, as required by the department:

(i) Data reports and analyses results for all samples of wastewater or storm water, receiving water, and sediments collected by the discharger or other parties relating to evaluation of the potential effects of the permitted discharge, as required by WAC 173-204-400.

(ii) Data reports and analyses results determined necessary to:

(A) Apply discharge modeling to the permitted discharge; and

(B) To identify and evaluate potential alternative chemical and biological effects of the discharge on the receiving water and sediments; and

(C) To identify and evaluate potential alternatives to define the areal size and location of a sediment impact zone needed by the discharge.

(iii) Data reports and analyses results from the discharger's application of the "CORMIX," "PLUMES," and/or "WASP" or an alternate sediment impact zone model(s) approved by the department under WAC 173-204-130(4), to the permitted discharge to identify and evaluate:

(A) Potential alternative chemical and biological effects of the discharge on the receiving water and sediments; and

(B) Potential alternatives for the areal distribution and location of a potential sediment impact zone required by the discharge.

(iv) Preferred alternative for closure of the potential sediment impact zone by active removal and/or natural recovery, and identified costs of the preferred closure method.

(b) Overlapping sediment impact zones. Overlapping sediment impact zones, as predicted by the "CORMIX," "PLUMES," and/or "WASP" models or an alternate sediment impact zone model(s) approved by the department under WAC 173-204-130(4), and the department's best professional judgment, shall be authorized only as follows:

(i) The applicable sediment impact zone maximum criteria of WAC 173-204-420 shall not be exceeded as a result of the multiple discharge sediment impact zones overlap; and

(ii) If the department determines that the applicable chemical contaminant concentration and biological effects restrictions of WAC 173-204-420 would be exceeded as a result of the overlap of multiple discharge sediment impact zones, the department may authorize the sediment impact zones after:

(A) Application of a waste load allocation process to the individual permitted discharges to identify individual permit effluent limitations necessary to meet:

(I) The applicable chemical contaminant concentration and biological effects restrictions for sediment impact zones required by this section; and/or

(II) Storm water best management practices required by the department; and

(B) Establishment of individual permit compliance schedules for the multiple permitted discharges to ensure compliance with:

(I) The permit effluent limitations established by the department using the waste load allocation process and best professional judgment; and

(II) The standards of WAC 173-204-400 through 173-204-420.

(5) Maintenance requirements.

(a) The department shall review sediment impact zone monitoring conducted by the discharger to evaluate compliance with the department's sediment impact zone authorization and the standards of WAC 173-204-400 through 173-204-420. The department may require additional sediment impact zone monitoring when the department determines that any sediment sampling station within an authorized sediment impact zone exceeds the sediment impact zone maximum criteria of WAC 173-204-420 or violates the sediment impact zone authorization as a result of the discharge.

(b) Whenever the department can clearly demonstrate that, as a result of an effluent discharge, a discharger violates, shall violate, or creates a substantial potential to violate the department's sediment impact zone authorization, or the sediment impact zone maximum criteria of WAC 173-204-420, the department shall:

(i) Provide written notification and supporting documentation of the department's clear demonstration determination to the affected discharger;

(ii) Establish a reasonable time frame for the affected discharger to either submit a written statement and supporting documentation rebutting the department's clear demonstration determination, or accept the department's determination. The discharger may use the clear demonstration methods identified in (c) of this subsection for rebuttal of the department's clear demonstration; and

(iii) Provide written notification of the department's determination concerning approval or denial of the submitted clear demonstration rebuttal to the discharger.

(c) For the purpose of this section, a clear demonstration shall consist of:

(i) Use of the sediment impact zone model(s) "CORMIX," "PLUMES," and/or "WASP" or other model(s) to demonstrate a discharge(s) is the source of the violation or potential violation; and

(ii) Use of one or more of the following methods to demonstrate a violation of the sediment impact zone authorization or the sediment impact zone maximum criteria of WAC 173-204-420:

(A) Direct sediment sampling. A violation of the sediment impact zone authorization and/or the sediment impact zone maximum criteria of WAC 173-204-420 is demonstrated when:

(I) The average chemical concentration for three stations within the sediment impact zone exceeds the sediment impact zone maximum criteria of WAC 173-204-420 due to the discharge source. This concentration average shall not include stations for which complete biological testing information shows that the biological effects requirements of WAC 173-204-420, or the authorized sediment impact zone if applicable, are met; or

(II) The biological effects at each of any three stations within the sediment impact zone exceed the sediment impact zone maximum biological effects criteria of WAC 173-204-420 or the authorized sediment impact zone as applicable, due to the discharge source; or

(B) Monitoring data which demonstrates a chemical contaminant concentration gradient toward the discharge source exists in sediments which violates the sediment impact zone authorization or the standards of WAC 173-204-420; or

(C) A trend analysis of the effluent chemical discharge quality and inplace sediment monitoring data which statistically demonstrates an ongoing violation or substantial potential to violate the sediment impact zone authorization or the standards of WAC 173-204-420; or

(D) Field depositional (e.g., sediment traps) and/or effluent particulate (e.g., centrifuge analysis) data which demonstrate an ongoing violation or substantial potential to violate the sediment impact zone authorization or the standards of WAC 173-204-420; or

(E) Mathematical or computer modeling which demonstrates an ongoing violation or substantial potential to violate the sediment impact zone authorization or the standards of WAC 173-204-420.

(d) The department's response to a clear demonstration of a violation or potential violation shall be to require maintenance activities in the following order:

(i) Require reanalysis of whether the discharger's effluent treatment complies with all known, available and reasonable methods of prevention, control, and treatment and best management practices based on the data used to establish the clear demonstration;

(ii) Alter the authorized sediment impact zone size and/or degree of effects consistent with the standards of this section and the results of direct sediment sampling;

(iii) Reduce impacts of the existing or potential violation by requiring additional discharge controls or additional sediment impact zone maintenance activities which can include, but are not limited to:

(A) Dredging and removal of sediments, solely for sediment impact zone maintenance needs or coordinated with maintenance dredging of commercially important areas, e.g., navigational lanes or ship berthing areas;

(B) Dredging, treatment, and replacement of sediments within the sediment impact zone; and/or

(C) Capping of sediments within the sediment impact zone;

(iv) Limit the quantity and/or quality of the existing permitted discharge; and/or

(v) Withdraw the department's sediment impact zone authorization and require final closure of the zone.

(e) All sediment impact zone maintenance actions conducted under this chapter shall provide for landowner review of the maintenance action plans prior to implementation of the action. In cases where the discharger is not able to secure access to lands subject to the sediment impact zone maintenance actions of this subsection, the department may facilitate negotiations or other proceedings to secure access to the lands. Requests for department facilitation of land access shall be submitted to the department in writing by the responsible discharger.

(6) Closure planning and requirements.

(a) The discharger shall select and identify a preferred method for closure of a sediment impact zone in the application required by WAC 173-204-415(2). Closure methods can include either active cleanup and/or natural recovery and monitoring. The department shall incorporate the discharger's identified closure method in the sediment impact zone authorization.

(b) The department may require closure of authorized sediment impact zones when the department determines that:

(i) The discharger has violated the sediment impact zone maintenance standards of subsection (5) of this section; or

(ii) The department determines that:

(A) The wastewater or storm water discharge quality will not violate the applicable sediment quality standards of WAC 173-204-320 through 173-204-340; or

(B) A sediment impact zone is no longer needed or eligible under the standards of WAC 173-204-410 through 173-204-415.

(7) Modification of sediment impact zones. The department may modify sediment impact zone authorization requirements where the nature of a person's activity which generates, transports, disposes, prevents, controls, or treats effluent discharges has substantially changed and been demonstrated to the department's satisfaction. The modification may occur after consideration of the following:

(a) Reduction of effects. Assessment of the discharge activities and treatment methods shall be conducted by the

discharger to demonstrate to the satisfaction of the department that:

(i) Elimination of the sediment impact zone is not practicable; and

(ii) Further reduction in any existing or proposed sediment impact zone area size and/or level of contamination or effects is not practicable in consideration of discharge requirements for all known, available and reasonable methods of prevention, control, and treatment, best management practices, and applicable waste reduction and recycling provisions.

(b) Alterations. There are substantial alterations or additions to the person's activity generating effluent discharges which require authorization of a sediment impact zone which occur after permit issuance and justify application of permit conditions different from, or absent in, the existing permit.

(c) New information. Sediment impact zones may be modified when new information is received by the department that was not available at the time of permit issuance that would have justified the application of different sediment impact zone authorization conditions.

(d) New regulations. The standards or regulations on which the permit was based have changed by amended standards, criteria, or by judicial decision after the permit was issued.

(e) Changes in technology. Advances in waste control technology that qualify as "all known, available and reasonable methods of prevention, control, and treatment" and "best management practices" shall be adopted as permit requirements, as appropriate, in all permits reissued by the department.

(8) Renewal of previously authorized sediment impact zones. Renewal of sediment impact zones previously authorized under the standards of WAC 173-204-410 and this section shall be allowed under the following conditions:

(a) The department determines the discharge activities and treatment methods meet all known, available and reasonable methods of prevention, control, and treatment and best management practices as stipulated by the department; and

(b) The discharger demonstrates to the department's satisfaction that the discharge activities comply with the standards of WAC 173-204-400 through 173-204-420 and with the existing sediment impact zone authorization; and

(c) Reduction of effects. The discharger conducts an assessment of the permitted discharge activities and treatment methods and demonstrates to the department's satisfaction that:

(i) Elimination of the sediment impact zone is not practicable; and

(ii) A further reduction in any existing or proposed sediment impact zone area size and/or level of contamination is not practicable in consideration of discharge requirements for all known, available and reasonable methods of prevention, control, and treatment, best management practices, and applicable waste reduction and recycling provisions.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-415, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-415, filed 3/27/91, effective 4/27/91.]

WAC 173-204-420 Sediment impact zone maximum criteria. This section establishes minor adverse effects as the maximum chemical contaminant concentration, maximum health risk to humans, maximum biological effects level, maximum other toxic, radioactive, biological, or deleterious substance level, and maximum nonanthropogenically affected sediment quality level allowed within authorized sediment impact zones due to an existing or proposed discharge. If the department determines that the standards of this section are or will be exceeded as a result of an existing or proposed discharge(s), the department shall authorize a sediment impact zone or modify a sediment impact zone authorization consistent with the standards of WAC 173-204-400 through 173-204-420 such that individual permit effluent limitations, requirements, and compliance time periods are sufficient to meet the standards of this section as applicable.

(1) Applicability.

(a) The marine sediment impact zone maximum chemical criteria, and the marine sediment biological effects criteria, and the marine sediment human health criteria, and the marine sediment other toxic, radioactive, biological or deleterious substance criteria and the marine sediment nonanthropogenically affected sediment criteria of this section shall apply to marine sediments within Puget Sound.

(b) Non-Puget Sound marine sediment impact zone maximum criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(c) Low salinity sediment impact zone maximum criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(d) Freshwater sediment impact zone maximum criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(2) Puget Sound marine sediment impact zone maximum chemical criteria. The maximum chemical concentration levels that may be allowed within an authorized sediment impact zone due to a permitted or otherwise authorized discharge shall be at or below the chemical levels stipulated in Table II, Sediment Impact Zone Maximum Chemical Criteria, except as provided for by the marine sediment biological effects restrictions of subsection (3) of this section, and any compliance time periods established under WAC 173-204-410 (6)(d) and 173-204-415.

(a) Where laboratory analysis indicates a chemical is not detected in a sediment sample, the detection limit shall be reported and shall be at or below the Marine Sediment Quality Standards chemical criteria value set in WAC 173-204-320(2).

(b) Where chemical criteria in this table represent the sum of individual compounds or isomers, the following methods shall be applied:

(i) Where chemical analyses identify an undetected value for every individual compound/isomer then the single highest detection limit shall represent the sum of the respective compounds/isomers; and

(ii) Where chemical analyses detect one or more individual compound/isomers, only the detected concentrations will be added to represent the group sum.

(c) The listed chemical parameter criteria represent concentrations in parts per million, "normalized," or expressed, on a total organic carbon basis. To normalize to total organic carbon, the dry weight concentration for each parameter is divided by the decimal fraction representing the percent total organic carbon content of the sediment.

(d) The LPAH criterion represents the sum of the following "low molecular weight polynuclear aromatic hydrocarbon" compounds: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, and Anthracene. The LPAH criterion is not the sum of the criteria values for the individual LPAH compounds as listed.

(e) The HPAH criterion represents the sum of the following "high molecular weight polynuclear aromatic hydrocarbon" compounds: Fluoranthene, Pyrene, Benz(a)anthracene, Chrysene, Total Benzofluoranthenes, Benzo(a)pyrene, Indeno(1,2,3,-c,d)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene. The HPAH criterion is not the sum of the criteria values for the individual HPAH compounds as listed.

(f) The TOTAL BENZOFLUORANTHENES criterion represents the sum of the concentrations of the "B," "J," and "K" isomers.

Table II

Puget Sound Marine Sediment Impact Zones
Maximum Chemical Criteria

CHEMICAL PARAMETER	MG/KG DRY WEIGHT (PARTS PER MILLION (PPM) DRY)
ARSENIC	93
CADMIUM	6.7
CHROMIUM	270
COPPER	390
LEAD	530
MERCURY	0.59
SILVER	6.1
ZINC	960
CHEMICAL PARAMETER	**MG/KG ORGANIC CARBON (PPM CARBON)**
LPAH	780
NAPHTHALENE	170
ACENAPHTHYLENE	66
ACENAPHTHENE	57
FLUORENE	79
PHENANTHRENE	480
ANTHRACENE	1200
2-METHYLNAPHTHALENE	64
HPAH	5300
FLUORANTHENE	1200
PYRENE	1400
BENZ(A)ANTHRACENE	270
CHRYSENE	460
TOTAL BENZOFLUORANTHENES	450
BENZO(A)PYRENE	210
INDENO (1,2,3,-C,D) PYRENE	88
DIBENZO (A,H) ANTHRACENE	33
BENZO(G,H,I)PERYLENE	78
1,2-DICHLOROBENZENE	2.3
1,4-DICHLOROBENZENE	9
1,2,4-TRICHLOROBENZENE	1.8
HEXACHLOROBENZENE	2.3
DIMETHYL PHTHALATE	53
DIETHYL PHTHALATE	110
DI-N-BUTYL PHTHALATE	1700
BUTYL BENZYL PHTHALATE	64
BIS (2-ETHYLHEXYL) PHTHALATE	78
DI-N-OCTYL PHTHALATE	4500
DIBENZOFURAN	58
HEXACHLOROBUTADIENE	6.2
N-NITROSODIPHENYLAMINE	11
TOTAL PCB'S	65
CHEMICAL PARAMETER	**UG/KG DRY WEIGHT (PARTS PER BILLION (PPB) DRY)**
PHENOL	1200
2-METHYLPHENOL	63
4-METHYLPHENOL	670
2,4-DIMETHYL PHENOL	29
PENTACHLOROPHENOL	690
BENZYL ALCOHOL	73
BENZOIC ACID	650

(3) Puget Sound marine sediment impact zone maximum biological effects criteria. The maximum biological effects level that may be allowed within an authorized sediment impact zone shall be at or below a minor adverse biological effects level. The acute and chronic effects biological tests of WAC 173-204-315(1) may be used to determine compliance with the minor adverse biological effects restriction within an authorized sediment impact zone as follows:

(a) When using biological testing to determine compliance with the maximum biological effects criteria within a sediment impact zone, a person shall select and conduct any two acute effects tests and any one chronic effects test.

(b) The biological tests shall not be considered valid unless test results for the appropriate control and reference sediment samples meet the performance standards described in WAC 173-204-315(2).

(c) The sediment impact zone maximum biological effects level is established as that level below which any two of the biological tests in any combination exceed the criteria of WAC 173-204-320(3), or one of the following biological test determinations is made:

(i) Amphipod: The test sediment has a higher (statistically significant, t test, $p \leq 0.05$) mean mortality than the reference sediment and the test sediment mean mortality is greater than a value represented by the reference sediment mean mortality plus thirty percent; or

(ii) Larval: The test sediment has a mean survivorship of normal larvae that is less (statistically significant, t test, $p \leq 0.05$) than the mean normal survivorship in the reference sediment sample and the test sediment mean normal survivorship is less than seventy percent of the mean normal survivorship in the reference sediment (i.e., the test sediment has a mean combined abnormality and mortality that is greater than thirty percent relative to time-final in the reference sediment); or

(iii) Benthic abundance: The test sediment has less than fifty percent of the reference sediment mean abundance of any two of the following major taxa: Class Crustacea, Phylum Mollusca or Class Polychaeta and the test sediment abundances are statistically different (t test, $p \leq 0.05$) from the reference sediment abundances; or

(iv) Juvenile polychaete: The test sediment has a mean individual growth rate of less than fifty percent of the reference sediment mean individual growth rate and the test sediment mean individual growth rate is statistically different (t test, $p \leq 0.05$) from the reference sediment mean individual growth rate.

(4) Puget Sound marine sediment impact zone maximum human health criteria. Reserved: The department may

determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(5) Puget Sound marine sediment impact zone maximum other toxic, radioactive, biological, or deleterious substances criteria. Other toxic, radioactive, biological or deleterious substances in, or on, sediments shall be below levels which cause minor adverse effects in marine biological resources, or which correspond to a significant health risk to humans, as determined by the department. The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(6) Puget Sound marine sediment impact zone maximum nonanthropogenically affected sediment criteria. Whenever the nonanthropogenically affected sediment quality is of a lower quality (i.e., higher chemical concentrations, higher levels of adverse biological response, or posing a higher threat to human health) than the applicable sediment impact zone maximum criteria established under this section, the existing sediment chemical and biological quality shall be identified on an area-wide basis as determined by the department, and used in place of the standards of WAC 173-204-420.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-420, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-420, filed 3/27/91, effective 4/27/91.]

WAC 173-204-510 Screening sediment station clusters of potential concern. (1) Using the sediment quality standards inventory of WAC 173-204-350, the department shall analyze the sediment sampling data to identify station clusters of potential concern and station clusters of low concern per the standards of this section. Station clusters of potential concern shall be further evaluated using the hazard assessment standards of WAC 173-204-530. Station clusters of low concern shall remain on the inventory and no further cleanup action determinations shall be taken by the department until the stations are reexamined per subsection (5) of this section.

(2) A station cluster is defined as any number of stations from the inventory of WAC 173-204-350 that are determined to be spatially and chemically similar. For the purpose of identifying a station cluster of potential concern per the procedures of this subsection, three stations with the highest contaminant concentration for any particular contaminant or the highest degree of biological effects as identified in WAC 173-204-520 are selected from a station cluster. This procedure may be repeated for multiple chemicals identified in WAC 173-204-520, recognizing that the three stations with the highest concentration for each particular contaminant may be different and the respective areas for all chemicals may overlap. The department shall review the inventory of WAC 173-204-350 to identify station clusters of potential concern via the following process:

(a) Identify if available, the three stations within a station cluster with the highest concentration of each chemical contaminant identified in WAC 173-204-520, Cleanup screening levels criteria; and

(b) For each contaminant identified in (a) of this subsection, determine the average concentration for the contaminant at the three stations identified in (a) of this subsection; and

(c) Identify if available, three stations within the station cluster with the highest level of biological effects for the biological tests identified in WAC 173-204-315(1); and

(d) If the average contaminant concentration for any three stations identified in (a) of this subsection, exceeds the applicable cleanup screening level in WAC 173-204-520, then the station cluster is defined as a station cluster of potential concern; and

(e) If the biological effects at each of the three stations from (c) of this subsection exceeds the cleanup screening level in WAC 173-204-520, then the station cluster is defined as a station cluster of potential concern; and

(f) If neither of the conditions of (d) or (e) of this subsection apply, then the station cluster is defined as a station cluster of low concern; and

(g) If the department determines that any three stations within a station cluster exceed the sediment cleanup screening levels human health criteria or the other toxic, radioactive, biological, or deleterious substances criteria or the nonanthropogenically affected criteria of WAC 173-204-520, then the station cluster is defined as a station cluster of potential concern.

(3) Notification. When a station cluster of potential concern has been identified, the department shall issue notification to the landowners, lessees, onsite dischargers, adjacent dischargers, and other persons determined appropriate by the department prior to the department's conducting a hazard assessment as defined in WAC 173-204-530.

(4) No further cleanup action determinations shall be taken with station clusters of low concern until the inventory of WAC 173-204-350 is updated and the stations reexamined per subsection (5) of this section. Station clusters of low concern shall receive no further consideration for active cleanup, unless new information indicates an increase of chemical contamination at the stations in question. Station clusters of low concern shall be evaluated by the department for improved source control and/or monitoring requirements of this chapter.

(5) The department may at any time reexamine a station or group of stations to reevaluate and identify station clusters of potential concern following the procedures of subsection (2) of this section when new information demonstrates to the department's satisfaction that reexamination actions are necessary to fulfill the purposes of WAC 173-204-500 through 173-204-590.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-510, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-510, filed 3/27/91, effective 4/27/91.]

WAC 173-204-520 Cleanup screening levels criteria. (1) Applicability.

(a) The marine sediment cleanup screening levels chemical criteria, and the marine sediment biological effects criteria, and the marine sediment other toxic, radioactive, biological, or deleterious substance criteria, and the marine sediment nonanthropogenically affected criteria of this section shall apply to marine sediments within Puget Sound. The cleanup screening levels establish minor adverse effects as the level above which station clusters of potential concern are defined, and at or below which station clusters of low concern are defined, per the procedures identified in WAC

173-204-510(2). The cleanup screening levels also establish the levels above which station clusters of potential concern are defined as cleanup sites, per the procedures identified in WAC 173-204-530, Hazard assessment. The criteria in Table III and this section also establish minor adverse effects as the Puget Sound marine sediment minimum cleanup level to be used in evaluation of cleanup alternatives per the procedures of WAC 173-204-560, and selection of a site cleanup standard(s) per the procedures of WAC 173-204-570.

(b) Non-Puget Sound marine sediment cleanup screening levels and minimum cleanup levels criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(c) Low salinity sediment cleanup screening levels and minimum cleanup levels criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(d) Freshwater sediment cleanup screening levels and minimum cleanup levels criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(2) Puget Sound marine sediment cleanup screening levels and minimum cleanup levels chemical criteria. The chemical concentration criteria in Table III establish the Puget Sound marine sediment cleanup screening levels and minimum cleanup levels chemical criteria.

(a) Where laboratory analysis indicates a chemical is not detected in a sediment sample, the detection limit shall be reported and shall be at or below the Marine Sediment Quality Standards chemical criteria value set in WAC 173-204-320(2).

(b) Where chemical criteria in this table represent the sum of individual compounds or isomers, the following methods shall be applied:

(i) Where chemical analyses identify an undetected value for every individual compound/isomer then the single highest detection limit shall represent the sum of the respective compounds/isomers; and

(ii) Where chemical analyses detect one or more individual compound/isomers, only the detected concentrations will be added to represent the group sum.

(c) The listed chemical parameter criteria represent concentrations in parts per million, "normalized," or expressed, on a total organic carbon basis. To normalize to total organic carbon, the dry weight concentration for each parameter is divided by the decimal fraction representing the percent total organic carbon content of the sediment.

(d) The LPAH criterion represents the sum of the following "low molecular weight polynuclear aromatic hydrocarbon" compounds: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, and Anthracene. The LPAH criterion is not the sum of the criteria values for the individual LPAH compounds as listed.

(e) The HPAH criterion represents the sum of the following "high molecular weight polynuclear aromatic hydrocarbon" compounds: Fluoranthene, Pyrene, Benz(a)anthracene, Chrysene, Total Benzofluoranthenes, Benzo(a)pyrene, Indeno(1,2,3,-c,d)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene. The HPAH criterion is not the sum of the criteria values for the individual HPAH compounds as listed.

(f) The TOTAL BENZOFLUORANTHENES criterion represents the sum of the concentrations of the "B," "J," and "K" isomers.

Table III

Puget Sound Marine Sediment
Cleanup Screening Levels
and
Minimum Cleanup Levels—
Chemical Criteria

CHEMICAL PARAMETER	MG/KG DRY WEIGHT (PARTS PER MILLION (PPM) DRY)
ARSENIC	93
CADMIUM	6.7
CHROMIUM	270
COPPER	390
LEAD	530
MERCURY	0.59
SILVER	6.1
ZINC	960
CHEMICAL PARAMETER	**MG/KG ORGANIC CARBON (PPM CARBON)**
LPAH	780
NAPHTHALENE	170
ACENAPHTHYLENE	66
ACENAPHTHENE	57
FLUORENE	79
PHENANTHRENE	480
ANTHRACENE	1200
2-METHYLNAPHTHALENE	64
HPAH	5300
FLUORANTHENE	1200
PYRENE	1400
BENZ(A)ANTHRACENE	270
CHRYSENE	460
TOTAL BENZOFLUORANTHENES	450
BENZO(A)PYRENE	210
INDENO (1,2,3,-C,D) PYRENE	88
DIBENZO (A,H) ANTHRACENE	33
BENZO(G,H,I)PERYLENE	78
1,2-DICHLOROBENZENE	2.3
1,4-DICHLOROBENZENE	9
1,2,4-TRICHLOROBENZENE	1.8
HEXACHLOROBENZENE	2.3
DIMETHYL PHTHALATE	53
DIETHYL PHTHALATE	110
DI-N-BUTYL PHTHALATE	1700
BUTYL BENZYL PHTHALATE	64
BIS (2-ETHYLHEXYL) PHTHALATE	78
DI-N-OCTYL PHTHALATE	4500
DIBENZOFURAN	58
HEXACHLOROBUTADIENE	6.2
N-NITROSODIPHENYLAMINE	11
TOTAL PCB'S	65
CHEMICAL PARAMETER	**UG/KG DRY WEIGHT (PARTS PER BILLION (PPB) DRY)**
PHENOL	1200
2-METHYLPHENOL	63
4-METHYLPHENOL	670
2,4-DIMETHYL PHENOL	29
PENTACHLOROPHENOL	690
BENZYL ALCOHOL	73
BENZOIC ACID	650

(3) Puget Sound marine sediment cleanup screening levels and minimum cleanup level biological criteria. The biological effects criteria of this subsection establish the

Puget Sound marine sediment cleanup screening level, and the Puget Sound marine sediment minimum cleanup level criteria.

(a) The acute and chronic effects biological tests of WAC 173-204-315(1) shall be used to:

(i) Identify the Puget Sound marine sediment cleanup screening level for the purpose of screening sediment station clusters of potential concern using the procedures of WAC 173-204-510(2); and

(ii) Identify the Puget Sound marine sediment cleanup screening level for the purpose of identifying station clusters of low concern and/or cleanup sites using the hazard assessment procedures of WAC 173-204-530(4); and/or

(iii) Identify the Puget Sound marine sediment minimum cleanup level to confirm minimum cleanup level determinations using the procedures of WAC 173-204-570(3).

(b) When using biological testing to determine if station clusters exceed the cleanup screening level or to identify the minimum cleanup level for a contaminated site, test results from at least two acute effects tests and one chronic effects test shall be evaluated.

(c) The biological tests shall not be considered valid unless test results for the appropriate control and reference sediment samples meet the performance standards described in WAC 173-204-315(2).

(d) The cleanup screening level and minimum cleanup level is exceeded when any two of the biological tests exceed the criteria of WAC 173-204-320(3); or one of the following test determinations is made:

(i) Amphipod: The test sediment has a higher (statistically significant, t test, $p \leq 0.05$) mean mortality than the reference sediment and the test sediment mean mortality is greater than a value represented by the reference sediment mean mortality plus thirty percent.

(ii) Larval: The test sediment has a mean survivorship of normal larvae that is less (statistically significant, t test, $p \leq 0.05$) than the mean normal survivorship in the reference sediment and the test sediment mean normal survivorship is less than seventy percent of the mean normal survivorship in the reference sediment (i.e., the test sediment has a mean combined abnormality and mortality that is greater than thirty percent relative to time-final in the reference sediment).

(iii) Benthic abundance: The test sediment has less than fifty percent of the reference sediment mean abundance of any two of the following major taxa: Class Crustacea, Phylum Mollusca or Class Polychaeta and the test sample abundances are statistically different (t test, $p \leq 0.05$) from the reference abundances.

(iv) Juvenile polychaete: The test sediment has a mean individual growth rate of less than fifty percent of the reference sediment mean individual growth rate and the test sediment mean individual growth rate is statistically different (t test, $p \leq 0.05$) from the reference sediment mean individual growth rate.

(4) Puget Sound marine sediment cleanup screening levels and minimum cleanup levels human health criteria. Reserved: The department may determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(5) Puget Sound marine sediment cleanup screening levels and minimum cleanup levels other toxic, radioactive, biological, or deleterious substances criteria. Other toxic, radioactive, biological, or deleterious substances in, or on, sediments shall be at or below levels which cause minor adverse effects in marine biological resources, or which correspond to a significant health risk to humans, as determined by the department. The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(6) Puget Sound marine sediment cleanup screening levels and minimum cleanup levels nonanthropogenically affected sediment criteria. Whenever the nonanthropogenically affected sediment quality is of a lower quality (i.e., higher chemical concentrations, higher levels of adverse biological response, or posing a higher threat to human health) than the applicable cleanup screening levels or minimum cleanup levels criteria established under this section, the existing sediment chemical and biological quality shall be identified on an area-wide basis as determined by the department, and used in place of the standards of WAC 173-204-520.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-520, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-520, filed 3/27/91, effective 4/27/91.]

WAC 173-204-530 Hazard assessment and site identification. (1) Purpose. A hazard assessment shall be performed to gather existing and available information to further characterize each station cluster of potential concern identified per WAC 173-204-510.

(2) Hazard assessment requirements. Onsite dischargers, lessees, landowners, and adjacent dischargers shall submit, upon the department's request, all existing and available information that would enable the department to:

(a) Determine the concentration and/or areal extent and depth of sediment contamination at the station cluster of potential concern by:

(i) Identifying the contaminants exceeding the applicable sediment quality standards of WAC 173-204-320 through 173-204-340;

(ii) Identifying individual stations within the station cluster of potential concern which exceed the sediment cleanup screening levels criteria of WAC 173-204-520;

(iii) Identifying the level of toxicity to the applicable biological test organisms of WAC 173-204-320 through 173-204-340;

(iv) Determining where the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, for any given contaminant, is met;

(v) Determining if concentrations of chemicals exist that potentially present a significant threat to human health;

(vi) Defining the location where the minimum cleanup level as defined in WAC 173-204-570 is met.

(b) Identify and characterize the present and historic source or sources of the contamination.

(c) Identify the location of sediment impact zones authorized under WAC 173-204-415.

(d) Identify sensitive resources in the vicinity of the station cluster of potential concern.

(e) Provide other information as determined necessary by the department for ranking sites under WAC 173-204-540.

(3) The department shall also compile existing and available information from other federal, state, and local governments that pertain to the topics in subsection (2) of this section.

(4) To identify cleanup sites, the department shall use all available information of acceptable quality gathered from the hazard assessment to evaluate station clusters of potential concern identified pursuant to WAC 173-204-510(2). For the purpose of identifying a cleanup site per the procedures of this subsection, three stations with the highest contaminant concentration for any particular contaminant or the highest degree of biological effects as identified in WAC 173-204-520 are selected from a station cluster of potential concern. This procedure may be repeated for multiple chemicals identified in WAC 173-204-520, recognizing that the three stations with the highest concentration for each particular contaminant may be different and the respective areas for all chemicals may overlap. The department shall review the list of station clusters of potential concern to identify cleanup sites via the following process:

(a) Identify if available, three stations within the station cluster of potential concern with the highest level of biological effects for the biological tests identified in WAC 173-204-315(1).

(b) Station clusters of potential concern where the level of biological effects for any three stations within the station cluster of potential concern exceeds the cleanup screening levels of WAC 173-204-520(3) shall be defined as cleanup sites.

(c) Identify if available, the three stations within a station cluster of potential concern with the highest concentration of each chemical contaminant identified in WAC 173-204-520, Cleanup screening levels criteria. For the purpose of identifying a cleanup site per the procedures of this subsection, stations that meet the biological standards of WAC 173-204-520(3) shall not be included in the evaluation of chemical contaminant concentrations.

(d) For each contaminant identified in (c) of this subsection, determine the average concentration for the contaminant at the three stations identified in (c) of this subsection.

(e) Station clusters of potential concern for which any average chemical concentration identified in (d) of this subsection exceeds the cleanup screening level chemical criteria of Table III shall be defined as cleanup sites.

(f) After completion of the hazard assessment, if neither of the conditions of (b) or (e) of this subsection apply, then the station cluster is defined as a station cluster of low concern.

(g) Station clusters of potential concern where the department determines that any three stations within the station cluster of potential concern exceed the sediment cleanup screening levels human health criteria or the other toxic, radioactive, biological, or deleterious substances criteria or the nonanthropogenically affected criteria of WAC 173-204-520, shall be defined as cleanup sites.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-530, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-530, filed 3/27/91, effective 4/27/91.]

WAC 173-204-560 Cleanup study. (1) Purpose. This section describes cleanup study plan and report standards which meet the intent of cleanup actions required under authority of chapter 90.48 and/or 70.105D RCW, and/or this chapter. Cleanup actions required under authority of chapter 70.105D RCW shall also meet all standards of chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation. The cleanup study plan and report standards in this chapter include activities to collect, develop, and evaluate sufficient information to enable consideration of cleanup alternatives and selection of a site-specific sediment cleanup standard prior to making a cleanup decision. Each person performing a cleanup action to meet the intent of this chapter shall submit a cleanup study plan and cleanup study report to the department for review and written approval prior to implementation of the cleanup action. The department may approve the cleanup study plan as submitted, may approve the cleanup study plan with appropriate changes or additions, or may require preparation of a new cleanup study plan.

(2) Scope of cleanup study plan. The scope of a cleanup study plan shall depend on the specific site informational needs, the site hazard, the type of cleanup action proposed, and the authority cited by the department to require cleanup. In establishing the necessary scope of the cleanup study plan, the department may consider cost mitigation factors, such as the financial resources of the person(s) responsible for the cleanup action. In all cases sufficient information must be collected, developed, and evaluated to enable the appropriate selection of a cleanup standard under WAC 173-204-570 and a cleanup action decision under WAC 173-204-580. The sediment cleanup study plan shall address:

(a) Public information/education;

(b) Site investigation and cleanup alternatives evaluation;

(c) Sampling plan and recordkeeping; and

(d) Site safety.

(3) Cleanup study plan public information/education requirements. The cleanup study plan shall encourage coordinated and effective public involvement commensurate with the nature of the proposed cleanup action, the level of public concern, and the existence of, or potential for adverse effects on biological resources and/or a threat to human health. The cleanup study plan shall address proposed activities for the following subjects:

(a) When public notice will occur, the length of the comment periods accompanying each notice, the potentially affected vicinity, and any other areas to be provided notice;

(b) Where public information repositories will be located to provide site information to the public;

(c) Methods for identifying the public's concerns, e.g., interviews, questionnaires, community group meetings, etc.;

(d) Methods for providing information to the public, e.g., press releases, public meetings, fact sheets, etc.;

(e) Coordination of public participation requirements mandated by other federal, state, or local laws;

(f) Amendments to the planned public involvement activities; and

(g) Any other elements that the department determines to be appropriate for inclusion in the cleanup study plan.

(4) Cleanup study plan site investigation and cleanup alternatives evaluation requirements. The content of the cleanup study plan for the site investigation and cleanup alternatives evaluation is determined by the type of cleanup action selected as defined under WAC 173-204-550. As determined by the department, the cleanup study plan shall address the following subjects:

(a) General site information. General information, including: Project title; name, address, and phone number of project coordinator; legal description of the cleanup site; area and volume dimensions of the site; present owners and operators of contaminant source discharges to site; chronological listing of past owners and operators of contaminant source discharges to the site and their respective operational history; and other pertinent information determined by the department.

(b) Site conditions map. An existing site conditions map which illustrates site features as follows:

(i) Property boundaries.

(ii) The site boundary defined by the individual contaminants exceeding the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 at the point where the concentration of the contaminant would meet the:

(A) Cleanup objective; and

(B) Minimum cleanup level; and

(C) Recommended cleanup standards.

(iii) Surface and subsurface topography.

(iv) Surface and subsurface structures.

(v) Utility lines.

(vi) Navigation lanes.

(vii) Current and ongoing sediment sources.

(viii) Other pertinent information determined by the department.

(c) Site investigation. Sufficient investigation to characterize the distribution of sediment contamination present at the site, and the threat or potential threat to human health and the environment. Where applicable to the site, these investigations shall address the following:

(i) Surface water and sediments. Investigations of surface water hydrodynamics and sediment transport mechanisms to characterize significant hydrologic features such as: Site surface water drainage patterns, quantities and flow rates, areas of sediment erosion and deposition including estimates of sedimentation rates, and actual or potential contaminant migration routes to and from the site and within the site. Sufficient surface water and sediment sampling shall be performed to adequately characterize the areal and vertical distribution and concentrations of contaminants. Recontamination potential of sediments which are likely to influence the type and rate of contaminant migration, or are likely to affect the ability to implement alternative cleanup actions shall be characterized;

(ii) Geology and ground water system characteristics. Investigations of site geology and hydrogeology to adequately characterize the physical properties and distribution of sediment types, and the characteristics of ground water flow rate, ground water gradient, ground water discharge areas, and ground water quality data which may affect site cleanup alternatives evaluations;

(iii) Climate. Information regarding local and regional climatological characteristics which are likely to affect surface water hydrodynamics, ground water flow characteristics, and migration of sediment contaminants such as: Seasonal patterns of rainfall; the magnitude and frequency of significant storm events; prevailing wind direction and velocity;

(iv) Land use. Information characterizing human populations exposed or potentially exposed to sediment contaminants released from the site and present and proposed uses and zoning for shoreline areas contiguous with the site; and

(v) Natural resources and ecology. Information to determine the impact or potential impact of sediment contaminants from the site on natural resources and ecology of the area such as: Sensitive environment, local and regional habitat, plant and animal species, and other environmental receptors.

(d) Sediment contaminant sources. A description of the location, quantity, areal and vertical extent, concentration and sources of active and inactive waste disposal and other sediment contaminant discharge sources which affect or potentially affect the site. Where determined relevant by the department, the following information shall be obtained by the department from the responsible discharger:

(i) The physical and chemical characteristics, and the biological effects of site sediment contaminant sources;

(ii) The status of source control actions for permitted and unpermitted site sediment contaminant sources; and

(iii) A recommended compliance time frame for known permitted and unpermitted site sediment contaminant sources which affect or potentially affect implementation of the timing and scope of the site cleanup action alternatives.

(e) Human health risk assessment. The current and potential threats to human health that may be posed by sediment site contamination shall be evaluated using a risk assessment procedure approved by the department.

(f) Cleanup action alternatives. Each cleanup study plan shall include an evaluation of alternative cleanup actions that protect human health and the environment by eliminating, reducing, or otherwise controlling risks posed through each exposure pathway and migration route. The number and types of alternatives to be evaluated shall take into account the characteristics and complexity of the site.

(i) The proposed site cleanup alternatives may include establishment of site units, as defined in WAC 173-204-200(24), with individual cleanup standards within the range required by WAC 173-204-570, based on site physical characteristics and complexity, and cleanup standard alternatives established on consideration of cost, technical feasibility, and net environmental impact.

(ii) The proposed site cleanup alternatives may include establishment of a sediment recovery zone as authorized under WAC 173-204-590, Sediment recovery zones. Establishment or expansion of a sediment recovery zone shall not be used as a substitute for active cleanup actions, when such actions are practicable and meet the standards of WAC 173-204-580. The cleanup study plan shall include the following information for evaluation of sediment recovery zone alternatives:

(A) The time period during which a sediment recovery zone is projected to be necessary based on source loading and net environmental recovery processes determined by application of the department's sediment recovery zone computer models "CORMIX," "PLUMES," and/or "WASP,"

or an alternate sediment recovery zone model(s) approved by the department under WAC 173-204-130(4) as limited by the standards of this section and the department's best professional judgment;

(B) The legal location and landowner(s) of property proposed as a sediment recovery zone;

(C) Operational terms and conditions including, but not limited to proposed confirmational monitoring actions for discharge effluent and/or receiving water column and/or sediment chemical monitoring studies and/or bioassays to evaluate ongoing water quality, sediment quality, and biological conditions within and adjacent to the proposed or authorized sediment recovery zone to confirm source loading and recovery rates in the proposed sediment recovery zone.

(D) Potential risks posed by the proposed sediment recovery zone to human health and the environment;

(E) The technical practicability of elimination or reduction of the size and/or degree of chemical contamination and/or level of biological effects within the proposed sediment recovery zone; and

(F) Current and potential use of the sediment recovery zone, surrounding areas, and associated resources that are, or may be, affected by releases from the zone.

(G) The need for institutional controls or other site use restrictions to reduce site contamination risks to human health.

(iii) A phased approach for evaluation of alternatives may be required for certain sites, including an initial screening of alternatives to reduce the number of potential remedies for the final detailed evaluation. The final evaluation of cleanup action alternatives that pass the initial screening shall consider the following factors:

(A) Overall protection of human health and the environment, time required to attain the cleanup standard(s), and on-site and off-site environmental impacts and risks to human health resulting from implementing the cleanup alternatives;

(B) Attainment of the cleanup standard(s) and compliance with applicable federal, state, and local laws;

(C) Short-term effectiveness, including protection of human health and the environment during construction and implementation of the alternative; and

(D) Long-term effectiveness, including degree of certainty that the alternative will be successful, long-term reliability, magnitude of residual, biological and human health risk, and effectiveness of controls for ongoing discharges and/or controls required to manage treatment residues or remaining wastes cleanup and/or disposal site risks;

(g) Ability to be implemented. The ability to be implemented including the potential for landowner cooperation, consideration of technical feasibility, availability of needed off-site facilities, services and materials, administrative and regulatory requirements, scheduling, monitoring requirements, access for construction, operations and monitoring, and integration with existing facility operations and other current or potential cleanup actions;

(h) Cost, including consideration of present and future direct and indirect capital, operation, and maintenance costs and other foreseeable costs;

(i) The degree to which community concerns are addressed;

(j) The degree to which recycling, reuse, and waste minimization are employed; and

(k) Environmental impact. Sufficient information shall be provided to fulfill the requirements of chapter 43.21C RCW, the State Environmental Policy Act. Discussions of significant short-term and long-term environmental impacts, significant irrevocable commitments of natural resources, significant alternatives including mitigation measures, and significant environmental impacts which cannot be mitigated shall be included.

(5) Cleanup study plan — sampling plan and recordkeeping requirements. The cleanup study plan shall address proposed sampling and recordkeeping activities to meet the standards of WAC 173-204-600, Sampling and testing plan standards, and WAC 173-204-610, Records management, and the standards of this section.

(6) Cleanup study plan site safety requirements. The cleanup study plan shall address proposed activities to meet the requirements of the Occupational Safety and Health Act of 1970 (29 U.S.C. Sec. 651 et seq.) and the Washington Industrial Safety and Health Act (chapter 49.17 RCW), and regulations promulgated pursuant thereto. These requirements are subject to enforcement by the designated federal and state agencies. Actions taken by the department under this chapter do not constitute an exercise of statutory authority within the meaning of section (4)(b)(1) of the Occupational Safety and Health Act.

(7) Cleanup study report. Each person performing a cleanup action to meet the intent of this chapter shall submit a cleanup study report to the department for review and written approval of a cleanup decision prior to implementation of the cleanup action. The sediment cleanup study report shall include the results of cleanup study site investigations conducted pursuant to subsection (4) of this section, and preferred and alternate cleanup action proposals based on the results of the approved cleanup study plan.

(8) Sampling access. In cases where the person(s) responsible for cleanup is not able to secure access to sample sediments on lands subject to a cleanup study plan approved by the department, the department may facilitate negotiations or other proceedings to secure access to the lands. Requests for department facilitation of land access for sampling shall be submitted to the department in writing by the person(s) responsible for the cleanup action study plan.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-560, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-560, filed 3/27/91, effective 4/27/91.]

WAC 173-204-590 Sediment recovery zones. (1) The purpose of this section is to set forth the requirements for establishment and monitoring of sediment recovery zones to meet the intent of sediment quality dilution zones authorized pursuant to RCW 90.48.520. The standards of this section are applicable to cleanup action decisions made pursuant to WAC 173-204-580 where selected actions leave in place marine, low salinity, or freshwater sediments that exceed the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(2) General requirements. Authorization of a sediment recovery zone by the department shall require compliance with the following general requirements:

(a) The sediment recovery zone shall be determined by application of the department's sediment recovery zone computer models "CORMIX," "PLUMES," and/or "WASP," or an alternate sediment recovery zone model(s) approved by the department under WAC 173-204-130(4) as limited by the standards of this section and the department's best professional judgment.

(b) The department shall provide specific authorization for a sediment recovery zone within the written approval of the cleanup study report and cleanup decision required under WAC 173-204-580.

(c) The time period during which a sediment recovery zone is authorized by the department shall be so stated in the department's written approval of the cleanup study report and cleanup decision.

(d) The department's written sediment recovery zone authorization shall identify the legal location and landowners of property proposed as a sediment recovery zone.

(e) Operational terms and conditions for the authorized sediment recovery zone pursuant to subsection (5) of this section shall be maintained at all times.

(f) Where cleanup is not practicable pursuant to the analysis under WAC 173-204-570(4), sediment recovery zones may be authorized for periods in excess of ten years.

(3) A sediment recovery zone authorization issued by the department under the authority of chapter 90.48 or 70.105D RCW, or other administrative means available to the department, does not constitute authorization to trespass on lands not owned by the applicant. These requirements do not address, and in no way alter, the legal rights, responsibilities, or liabilities of the permittee or landowner of the sediment recovery zone for any applicable requirements of proprietary, real estate, tort, and/or other laws not directly expressed as a requirement of this chapter.

(4) Prior to authorization, the department shall make a reasonable effort to identify and notify all landowners affected by the proposed sediment recovery zone. The department shall issue a sediment recovery zone notification letter to any person it believes to be a potentially affected landowner and other parties determined appropriate by the department. The notification letter shall be sent by certified mail, return receipt requested, or by personal service. The notification letter shall provide:

(a) The name of the person the department believes to be the affected landowner; and

(b) The names of other affected landowners to whom the department has sent a proposed sediment recovery zone notification letter; and

(c) The name of the sediment recovery zone applicant; and

(d) A general description of the proposed sediment recovery zone including the chemical(s) of concern by name and concentration, and the area of affected sediment; and

(e) The determination of the department concerning whether the proposed sediment recovery zone application meets the standards of this section; and

(f) The intention of the department whether to authorize the proposed sediment recovery zone; and

(g) Notification that the affected landowner may comment on the proposed sediment recovery zone. Any landowner comments shall be submitted in writing to the department within thirty days from the date of receipt of the notification letter, unless the department provides an extension.

(5) As determined necessary by the department, operational terms and conditions for the sediment recovery zone may include completion and submittal to the department of discharge effluent and/or receiving water column and/or sediment chemical monitoring studies and/or bioassays to evaluate ongoing water quality, sediment quality, and biological conditions within and adjacent to the proposed or authorized sediment recovery zone.

(6) The department shall review all data or studies conducted in accordance with a sediment recovery zone authorization to ensure compliance with the terms and conditions of the authorization and the standards of this section. Whenever, in the opinion of the department, the operational terms and conditions of a sediment recovery zone or the standards of this section are violated or there is a potential to violate the sediment recovery zone authorization or the standards of this section, or new information or a reexamination of existing information indicates the sediment recovery zone is no longer appropriate, the department may at its discretion:

(a) Require additional chemical or biological monitoring as necessary;

(b) Revise the sediment recovery zone authorization as necessary to meet the standards of this section;

(c) Require active contaminated sediment maintenance actions including additional cleanup in accordance with the standards of WAC 173-204-500 through 173-204-580; and/or

(d) Withdraw the department's authorization of the sediment recovery zone.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-590, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-590, filed 3/27/91, effective 4/27/91.]

Chapter 173-221A WAC
WASTEWATER DISCHARGE STANDARDS AND EFFLUENT LIMITATIONS

WAC

WAC 173-221A-030 Definitions. As used in this chapter, unless the context indicates otherwise:

"Department" means the department of ecology.

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

"General NPDES permit" means a permit designed to cover multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

"Individual NPDES permit" means a permit for a single point source or a single facility.

"Marine finfish rearing facilities" means those private and public facilities located within the salt water of the state where finfish are fed, nurtured, held, maintained, or reared to the size of release or for market sale.

"NPDES" means National Pollutant Discharge Elimination System.

"Permit or wastewater discharge permit" means an authorization, license, or equivalent control document issued by the department to implement chapters 173-220, 173-226, and/or 173-216 WAC.

"Sediment quality standards" means the standards set forth in chapter 173-204 WAC.

"Upland finfish facility" means those facilities not located within waters of the state where finfish are hatched, fed, nurtured, held, maintained, or reared to reach the size of release or for market sale. This includes fish hatcheries, rearing ponds, spawning channels, and other similarly constructed or fabricated public or private facility.

"Wastewater" means the water or liquid carried waste. These wastes may result from any process or activity, including but not limited to, of industry, manufacturer, trade, business, development of any natural resource, or from animal operations such as feed lots, poultry houses, dairies, or fish rearing operations. The term also includes contaminated storm water and leachate from solid waste facilities.

"Water quality standards" means as applicable: Chapter 173-201A WAC for surface waters, chapter 173-200 WAC for ground waters, and chapter 173-204 WAC for sediment.

"Waters of the state" includes those waters as defined as "waters of the United States" in 40 CFR 122.2 within the geographic boundaries of Washington state and "waters of the state" as defined in RCW 90.48.020.

"40 CFR" means Title 40 of the Code of Federal Regulations, as presently promulgated and subsequently amended or repromulgated.

[Statutory Authority: RCW 90.48.220. 95-22-079 (Order 93-26), § 173-221A-030, filed 10/31/95, effective 12/1/95. Statutory Authority: Chapter 90.48 RCW. 90-14-078 (Order 90-11), § 173-221A-030, filed 7/3/90, effective 8/3/90.]

WAC 173-221A-100 Upland finfish facilities. (1) **Which types of upland finfish facilities need a wastewater discharge permit?**

(a) A permit is required for:

(i) All facilities which produce more than 20,000 net pounds of finfish a year; or

(ii) Feeds more than 5,000 pounds of fish food during any calendar month; or

(iii) Is designated as a significant contributor of pollution by the department in accordance with 40 CFR 122.24.

(b) Facilities which do not require a permit under (a) of this subsection are conditionally exempt from the requirement to obtain a wastewater discharge permit provided they comply with subsections (2) through (6) of this section.

(2) **Time of compliance.** Each upland finfish rearing facility which requires a wastewater discharge permit in accordance with subsection (1) of this section shall submit a completed application form to the department at least one hundred eighty days in advance of the date when permit coverage is deemed necessary.

(3) **Prevention, control, and treatment.** Each upland finfish facility shall provide treatment prior to discharging to waters of the state regardless of receiving water quality. The minimum acceptable technology-based treatment requirements for upland finfish facilities required to obtain permits including general wastewater discharge permits are:

(a) For facilities that use a vacuum cleaning system, standpipe bottom-drain system or other method to remove solids from the water, raceways or ponds, with treatment in a separate settling basin or treatment system:

(i) All facilities utilizing off-line settling shall incorporate into the pond or raceway design methods to collect settleable solids. Methods such as screened settling zones in the downstream end at raceways shall be used to collect settleable solids prior to periodic removal to off-line settling basins.

(ii) The settling basin shall be designed to minimize short-circuiting and to provide a minimum total suspended solids average monthly percent removal of 85% and an average monthly settleable solids percent removal of 90%.

(iii) Turbulent flow shall be minimized within the cleaning system to avoid homogenization or solids.

(iv) Rearing of fish within the settling basin is not permitted.

(b) For facilities that provide in-line settling for the entire effluent;

(i) The settling basin shall be designed to minimize hydraulic short-circuiting.

(ii) The settling basin shall be designed to provide at least a twenty year sludge decomposition and storage capacity unless provisions are made for periodic sludge removal without interruption in treatment.

(iii) Rearing of fish within the settling basin is prohibited.

(c) For facilities with rearing ponds only, no other form of effluent treatment shall be required, provided the rearing pond has a minimum hydraulic retention time of two hours or more. Rearing vessels with less than two hours hydraulic retention time may be approved by the department in writing without additional treatment provided the applicant can demonstrate to the department, in advance, the ability to continuously comply with effluent limits established in subsection (4)(a) of this section.

(d) Each upland finfish facility that begins construction after September 1, 1990, or expands production by fifty percent over the production on the effective date of this rule shall either:

(i) Line all settling basins or otherwise ensure that the static (i.e., without inflow) seepage rate through the settling basin bottom and sides shall not be greater than a water surface drop of 0.10 inch per day; or

(ii) Demonstrate to the department through hydrogeologic investigation and/or ground water monitoring that the operation of the facility will not have an adverse impact upon ground water quality.

(e) Notwithstanding the treatment requirements of this subsection, more stringent or additional conditions may be required by the department as necessary on a case-by-case basis to mitigate adverse water quality impacts or meet water quality standards, ground water standards, sediment standards or other applicable requirements of federal or state law.

(4) **Effluent standards.** Wastewater from all upland finfish facilities regardless of size shall meet the following effluent discharge standards.

(a) Facility discharges.

(i) The instantaneous maximum total suspended solids concentration in the effluent at the point of discharge to the receiving environment shall not exceed 15 milligrams per liter of effluent.

(ii) The average total suspended solids concentration in the effluent at the point of discharge to the receiving environment shall not exceed 5 milligrams per liter of effluent.

(iii) The average settleable solids concentration in the effluent at the point of discharge to the receiving environment shall not exceed 0.1 milliliter per liter of effluent.

(iv) Effluent limitations shall apply as net values provided the criteria contained in 40 CFR 122.45 (net gross allowance) are met.

(b) Off-line settling basin effluent.

(i) The instantaneous maximum total suspended solids concentration shall not exceed 100 milligrams per liter of effluent.

(ii) The instantaneous maximum settleable solids concentration in off-line settling basin effluent shall not exceed 1.0 milliliter per liter of effluent.

(c) Discharges during rearing pond drawdown for fish release shall meet the following discharge standards. Pond drawdown for purposes other than fish release shall meet the discharger standards in (a) of this subsection.

(i) The instantaneous maximum total suspended solids concentration in the rearing pond effluent shall not exceed 100 milligrams per liter.

(ii) The instantaneous maximum settleable solids concentration in the rearing pond effluent shall not exceed 1.0 milliliter per liter.

(d) Test procedures. All sampling and analytical methods used to determine compliance with standards specified in this subsection shall, unless otherwise approved by the department, conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.

(e) Notwithstanding the numerical discharge standards within this subsection, each upland finfish facility shall be operated in the most efficient manner possible. Additional effluent limits and/or more stringent effluent limits may be required as necessary on a case-by-case basis to meet water quality standards, ground water quality standards, sediment quality standards, or other applicable requirements of federal or state law.

(5) **General requirements.** The following practices shall be applicable to all upland finfish facilities.

(a) Sand, silt, mud, solids, sludges, filter backwash, debris, or other pollutants deposited or removed in the course of treatment or control of water supply and wastewaters shall be disposed of in a manner so as to prevent such materials from entering waters of the state.

(b) Discharging untreated cleaning wastes (e.g., obtained from a vacuum or standpipe bottom drain system) to waters of the state is prohibited.

(c) Sweeping or intentionally discharging accumulated solids from raceways or ponds to waters of the state without prior treatment is prohibited.

(d) Practices such as removing dam boards in raceways or ponds, that allow accumulated solids to discharge to waters of the state are prohibited.

(e) The discharge of any drugs or chemicals in toxic amounts or in violation of water quality standards to waters of the state is prohibited.

(f) Disease control chemical use practices. The following requirements only apply to those drugs and chemicals included in feed or administered by a bath or dip treatment which results or may result in those materials being discharged to waters of the state. These requirements do not apply to drugs and chemicals administered by injections or by dip treatments which results in no discharge to waters of the state.

(i) Disease control chemicals and drugs approved for hatchery use by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA) may be used.

(ii) USFDA approved Investigational New Animal Drugs (INADs) may also be used at a facility, provided the conditions detailed in a facility's INAD permit application are met.

(iii) All disease control drug and chemical use must be done in conformance with product label instructions, approved INAD protocols, or be administered by or under the supervision of a licensed veterinarian.

(iv) Disease control drugs and chemicals which are not used in accordance with product label instructions, or under USFDA approved INAD protocols must:

(A) Be administered by or under the supervision of a licensed veterinarian; and

(B) Be approved in advance by the department.

(v) The department may require disease control drug and chemical use reports from each facility.

(g) Fish mortalities, kill spawning, processing wastes, and any leachate from these materials shall be disposed of in a manner so as to prevent such materials from entering the waters of the state.

(h) Right of entry.

(i) Authorized representatives of the department, upon presentation of identification shall be allowed to:

(A) Enter in or upon the facility at all reasonable times;

(B) Have access to and copy at all reasonable times any records relative to information that must be kept or provided the department under the terms of, as applicable: The conditional exemption or wastewater discharge permit;

(C) Inspect, investigate, and photograph at all reasonable times any production, collection, treatment, pollution management, monitoring, or discharge equipment or facilities, or any conditions relating to pollution or possible pollution of any waters of the state;

(D) Sample and make tests at all reasonable times; and

(E) The term "reasonable times" shall include normal business hours, hours during which production, prevention, control, or treatment occurs or times when the department reasonably suspects a violation of this chapter is or may be occurring.

(6) **Receiving water quality studies.** Receiving water quality studies shall be required as follows for each upland finfish facility which begins construction after September 1, 1990, or expands production by fifty percent over the production on the effective date of this rule. Existing

facilities may be required to do receiving water studies on a case-by-case basis. Dilution shall be evaluated by the department using total facility effluent at maximum production at the lowest seven-day average receiving stream flow with a 10-year recurrence interval (7Q10).

(a) For facilities with a discharge of one part upland finfish facility effluent to ten parts or more of receiving water, receiving water studies are not required unless significant data indicates water quality standards would be violated.

(b) For facilities with an effluent dilution of between one part upland finfish facility effluent to three parts receiving water and one part effluent to ten parts receiving water, receiving water studies may be required by the department. The department shall provide the upland finfish operator or permit applicant with written documentation on the need for receiving water studies upon request. Factors to be considered by the department in determining the need for and objectives of special receiving water studies may include, but are limited to, the following:

(i) The water quality classification of the receiving water of the state;

(ii) The potential water quality impacts of surrounding land use practices and/or existing and proposed discharges including the proposed upland finfish hatching and rearing facility;

(iii) The likelihood that the proposed discharge will have an effect on existing water quality and/or present or future beneficial uses;

(iv) The proximity of the discharge to a quiescent water body such as a lake or a reservoir;

(v) On-site inspection;

(vi) The potential of the discharge to have an adverse impact on receiving water quality such that water quality standards would be violated; and

(vii) Possible beneficial impacts of upland finfish discharges on existing water quality such as flow augmentation.

(c) For facilities with an effluent dilution of one part upland finfish facility effluent to three parts or less of receiving waters, receiving water quality studies will generally be required for new facilities and may be required on a case-by-case basis for existing facilities.

(d) Receiving water quality studies content and scope shall include, as required by the department an analysis of the proposed facilities discharge and any impacts upon the receiving water of the state, including, but not limited to, the following:

(i) Identification of existing and potential beneficial uses of the receiving water of the state and an evaluation of the impact on those beneficial uses of the proposed discharge;

(ii) Hydraulic impacts;

(iii) The impacts of both nitrogen and phosphorous compounds and the potential for eutrophication of the receiving waters;

(iv) The use of chemicals and medications within the facility, their toxicity, and the impacts on the receiving waters;

(v) The effect of the facilities on receiving water temperature and dissolved oxygen concentrations; and

(vi) The potential for impacting any specified identified water use.

(vii) Possible beneficial impact of upland finfish discharges on existing water quality such as flow augmentation.

[Statutory Authority: RCW 90.48.220. 95-22-079 (Order 93-26), § 173-221A-100, filed 10/31/95, effective 12/1/95. Statutory Authority: Chapter 90.48 RCW. 90-14-078 (Order 90-11), § 173-221A-100, filed 7/3/90, effective 8/3/90.]

WAC 173-221A-110 Marine finfish rearing facilities. (1) This rule sets waste discharge standards for finfish rearing facilities located within marine waters as required by RCW 90.48.220. Net-pens, floating raceways, closed bag, and barge systems are some examples of finfish rearing facilities covered by this section.

(2) **Which types of marine finfish rearing facilities need a wastewater discharge permit?**

(a) A permit is required for:

(i) All facilities which produce more than 20,000 net pounds of finfish a year; or

(ii) Feeds more than 5,000 pounds of fish food during any calendar month; or

(iii) Is designated as a significant contributor of pollution by the department in accordance with 40 CFR 122.24.

(b) Facilities which do not require a permit under (a) of this subsection are conditionally exempt from the requirement to obtain a state waste discharge permit under chapter 173-216 WAC provided they comply with subsections (3) through (5) of this section.

(3) **Time of compliance.**

(a) Each marine finfish rearing facility which requires a wastewater discharge permit in accordance with subsection (2) of this section shall submit a completed application form to the department at least one hundred eighty days in advance of the date when permit coverage is deemed necessary.

(b) Existing unpermitted marine finfish rearing facilities which require a waste discharge permit in accordance with subsection (2) of this section shall file a completed application form with the department by January 31, 1996.

(4) **Requirements applicable to all marine finfish rearing facilities.** All marine finfish rearing facilities regardless of size, shall be operated so as to:

(a) Comply with all applicable state water quality standards and sediment quality standards.

(b) Comply with the following general requirements meant to reduce pollutants in the effluent:

(i) Feeding practices. Fish food shall be dispersed in a manner which maximizes ingestion by the reared fish.

(ii) Disease control chemical use practices. The following requirements only apply to those drugs and chemicals included in feed or administered by a bath or dip treatment which results or may result in those materials being discharged to waters of the state. These requirements do not apply to drugs and chemicals administered by injections or by dip treatments which results in no discharge to waters of the state.

(A) Disease control chemicals and drugs approved for use by the United States Food and Drug Administration

(USFDA) or the United States Environmental Protection Agency (USEPA) may be used.

(B) USFDA approved Investigational New Animal Drugs (INADs) may also be used at a facility, provided the conditions detailed in a facility's INAD permit application are met.

(C) All disease control drug and chemical use must be done in conformance with product label instructions, approved INAD protocols, or be administered by or under the supervision of a licensed veterinarian.

(D) Disease control drug and chemicals which are not used in accordance with product label instructions, or under USFDA approved INAD protocols must:

(I) Be administered by or under the supervision of a licensed veterinarian; and

(II) Be approved in advance by the department.

(E) The department may require disease control drug and chemical use reports from each facility.

(iii) Right of entry. Authorized representatives of the department, upon presentation of identification shall be allowed to:

(A) Enter in or upon the facility at all reasonable times;

(B) Have access to and copy at all reasonable times any records relative to information that must be kept or provided the department under the terms of, as applicable: The conditional exemption or wastewater discharge permit;

(C) Inspect, investigate, and photograph at all reasonable times any production, collection, treatment, pollution management, monitoring, or discharge equipment or facilities, or any conditions relating to pollution or possible pollution of any waters of the state;

(D) Sample and make tests at all reasonable times; and

(E) The term "reasonable times" shall include normal business hours, hours during which production, prevention, control, or treatment occurs or times when the department reasonably suspects a violation of this chapter is or may be occurring.

(iv) Operational conditions.

(A) Fish mortalities, harvest blood, and any leachate from these materials shall be stored and disposed of in a manner so as to prevent such materials from entering the waters of the state.

(B) Accumulated solids and attached marine growth contained within or on the finfish rearing units shall be disposed of in a manner which prevents, to the maximum extent practicable, these materials from entering or reentering waters of the state.

(C) Discharging accumulated solids and marine growth removed from the finfish rearing units into waters of the state without prior treatment is prohibited.

(D) Storage quantities of all necessary chemicals, petroleum products, and potentially toxic substances essential to the day-to-day operation of the facility shall be minimized. These products shall be kept in leak proof storage areas which provide secondary containment.

(c) Pollution prevention plan. All marine finfish rearing facilities shall develop a pollution prevention plan within six months of permit issuance. Facilities which do not require discharge permits shall prepare and implement a pollution prevention plan within a year of the adoption date of this rule, or when fish are introduced, whichever is later.

(i) The plan shall address: Operating, spill prevention, spill response, solid waste, and storm water discharge practices which prevent or minimize the release of pollutants from the facility to the waters of the state.

(ii) Each facility shall be operated in accordance with its plan along with any subsequent plan amendments or revisions.

(iii) A copy of the most current version of the plan shall be maintained at the facility and available to the department upon request.

(5) **Environmental studies.** The purpose of these studies shall be to determine the potential of the discharge from a marine finfish rearing facility to have an adverse impact on existing water quality and sediment quality.

(a) Environmental studies shall be required as necessary to determine compliance with applicable water quality standards for each new facility which begins construction after November 1, 1995, or for each permitted facility which expands production by fifty percent over the permitted production on the effective date of this rule. Permitted production means the production level authorized for a facility in a waste discharge permit issued pursuant to chapter 90.48 RCW or shoreline permit issued pursuant to chapter 90.58 RCW. Existing facilities may be required to do environmental studies on a case-by-case basis.

(b) Environmental monitoring and reporting programs will be required to ensure the discharge from a facility complies with state water quality standards and sediment management standards. The department may require environmental monitoring programs through the issuance of wastewater discharge permits, and/or through administrative orders.

[Statutory Authority: RCW 90.48.220. 95-22-079 (Order 93-26), § 173-221A-110, filed 10/31/95, effective 12/1/95.]

Chapter 173-303 WAC
DANGEROUS WASTE REGULATIONS

WAC

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
(j) Scrap metal
(k) Spent material

(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 which 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.

(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 constituting disposal WAC 173-303-016 (5)(a)	Energy recovery/ fuel WAC 173-303-016 (5)(b)	Reclamation WAC 173-303-016 (5)(c)	Speculative accumulation WAC 173-303-016 (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 characteristic[1] or criteria[2]	(*)	(*)	——	(*)
Sludges exhibiting a characteristic[1] or criteria[2]	(*)	(*)	——	(*)
Scrap metal	(*)	(*)	(*)	(*)

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

1 The characteristics of dangerous waste are described in WAC 173-303-090.

2 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:

(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 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 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), § 173-303-016, file 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 (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process;

(ii) Spent pickle liquor which is reused in wastewater treatment at a facility holding a national pollutant discharge elimination system (NPDES) permit, or which is being accumulated, stored, or treated before such reuse;

(iii) Spent sulfuric acid used to produce virgin sulfuric acid.

(3) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (as described in subsection (2)(a) of this section):

(a) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

(b) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

(c) Materials accumulated speculatively as defined in WAC 173-303-016 (5)(d)(ii); or

(d) Materials listed in WAC 173-303-016(6); or

(e) Any materials that the department determines are being accumulated, used, reused or handled in a manner that poses a threat to public health or the environment.

(4) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing chapter 70.105 RCW who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

(5) Variances from classification as a solid waste.

(a) In accordance with the standards and criteria in (b) of this subsection and the procedures in subsection (7) of this section, the department may determine on a case-by-case basis that the following recycled materials are not solid wastes:

(i) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in WAC 173-303-016 (5)(d)(ii));

(ii) Materials that are reclaimed and then reused within the original production process in which they were generated;

(iii) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered;

(iv) State-only dangerous materials (not regulated as hazardous wastes (defined in WAC 173-303-040) by EPA) which serve as an effective substitute for a commercial product or raw material.

(b) Standards and criteria for variances from classification as a solid waste.

(i) The department may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The department's decision will be based on the following standards and criteria:

(A) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);

(B) The reason that the applicant has accumulated the material for one or more years without recycling seventy-five

percent of the volume accumulated at the beginning of the year;

(C) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;

(D) The extent to which the material is handled to minimize loss;

(E) Other relevant factors.

(ii) The department may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

(A) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

(B) The prevalence of the practice on an industry-wide basis;

(C) The extent to which the material is handled before reclamation to minimize loss;

(D) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;

(E) The location of the reclamation operation in relation to the production process;

(F) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

(G) Whether the person who generates the material also reclaims it;

(H) Other relevant factors.

(iii) The department may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:

(A) The degree of processing the material has undergone and the degree of further processing that is required;

(B) The value of the material after it has been reclaimed;

(C) The degree to which the reclaimed material is like an analogous raw material;

(D) The extent to which an end market for the reclaimed material is guaranteed;

(E) The extent to which the reclaimed material is handled to minimize loss;

(F) Other relevant factors.

(iv) The department may grant requests for a variance from classifying as a solid waste those materials that serve as an effective substitute for a commercial product or raw material, when such material is not regulated as hazardous waste (defined in WAC 173-303-040) 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 provided by newspaper advertisement and radio broadcast in the locality where the recycler is located. The department will accept comment on the tentative decision for thirty days, and may also hold a public hearing upon request or at its discretion. The department will issue a final decision after receipt of comments and after the hearing (if any), and this decision may not be appealed to the department.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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.

(1) ASTM - American Society for Testing Materials

(2) APHA - American Public Health Association

(3) CDC - Center for Disease Control

(4) CFR - Code of Federal Regulations

(5) DOT - Department of Transportation

(6) °C - degrees Celsius

(7) DW - dangerous waste

(8) DWS - drinking water standards of the Safe Drinking Water Act

(9) EHW - extremely hazardous waste

(10) EP - extraction procedure

(11) EPA - Environmental Protection Agency

(12) °F - degrees Fahrenheit

(13) g - gram

(14) IARC - International Agency for Research on Cancer

(15) kg - kilogram (one thousand grams)

(16) L - liter

(17) lb - pound

(18) LC_{50} - median lethal concentration

(19) LD_{50} - median lethal dose

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

(21) mg - milligram (one thousandth of a gram)

(22) NFPA - National Fire Protection Association

(23) NIOSH - National Institute for Occupational Safety and Health

(24) pH - negative logarithm of the hydrogen ion concentration

(25) POTW - publicly owned treatment works

(26) ppm - parts per million (weight/weight)

(27) RCRA - Resource Conservation and Recovery Act

(28) RCW - Revised Code of Washington

(29) TSD facility - treatment, storage, or disposal facility

(30) UBC - Uniform Building Code

(31) UFC - Uniform Fire Code

(32) USCG - United States Coast Guard

(33) USGS - United States Geological Survey

(34) WAC - Washington Administrative Code

(35) % - percent

(36) # - number

[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.")

"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.

"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 ground water to wells or springs.

"Asbestos containing waste material" means any waste that contains more than one percent asbestos by weight and that can be crumbled, pulverized, or reduced to powder when dry, by hand pressure.

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

"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 co-product 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.

"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 TSD facilities to ensure that all such facilities are closed in an acceptable manner (see also "post-closure").

"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 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 as amended in 1980 and 1983, and chapter 70.105A RCW, or regulations issued under authority of state law, which seeks to require compliance, or which is in the nature of an enforcement action or an action to cure a violation. A compliance procedure includes a notice of intention to terminate a permit pursuant to WAC 173-303-830(5), or an application in the state superior court for appropriate relief under the Hazardous Waste Management Act. A compliance procedure is considered to be pending from the time a notice of violation or of intent to terminate a permit is issued or judicial proceedings are begun, until the department notifies the owner or operator in writing that the violation has been corrected or that the procedure has been withdrawn or discontinued.

"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 the public health or environment.

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

"Corrective action management unit" or "CAMU" means an area within a facility that is designated by the director pursuant to WAC 173-303-646 (4), (5), and (6) for the purpose of implementing the corrective action requirements of WAC 173-303-646(2). A CAMU may be used only for the management of remediation wastes pursuant to implementing such corrective action requirements at the facility.

"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.

"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 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 the facility designated by the generator on the manifest to receive a dangerous waste shipment and which is authorized pursuant to this chapter or RCRA to recycle or manage dangerous waste.

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

"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 run-on 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.

"Environment" means any air, land, water, or ground water.

"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 cancelled or modified without substantial loss, for physical construction of the site or installation of the tank system to be completed within a reasonable time.

"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 cancelled or modified without substantial loss, for physical construction of the facility to be completed within a reasonable time.

"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 (e.g., 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 the purposes of implementing corrective action imposed pursuant to WAC 173-303-646 (2) or (3), the term facility has the following meaning: All contiguous property under the control of an owner or operator seeking or required to have a permit under the provisions of chapter 70.105 RCW or chapter 173-303 WAC, including the definition of facility at RCW 70.105D.020(3).

"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), and 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.

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

"Halogenated hydrocarbons" (HH) means any organic compounds which, as part of their composition, include one or more atoms of fluorine, chlorine, bromine, iodine, or astatine. The requirements of this chapter apply to only those halogenated hydrocarbons which can be obtained using the testing method described in WAC 173-303-110, testing methods, and which are persistent dangerous wastes.

"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.)

"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.

"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 which is unsuitable for placement in a particular device or facility because it may corrode or decay the containment materials, or is unsuitable for mixing with another waste or material because the mixture might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, fumes, mists, or gases, or flammable fumes or gases.

"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.

"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.

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

"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.

"Leachable inorganic waste" means solid dangerous waste (i.e., passes paint filter test) 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, prepared in accordance with the requirements of WAC 173-303-180, which is used to identify the quantity, composition, origin, routing, and destination of a dangerous waste while it is being transported to a point of transfer, disposal, treatment, or storage.

"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.

"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, containment building, corrective action management unit, temporary unit, underground injection well with appropriate technical standards under 40 CFR Part 146, 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, geographically contiguous, or bordering property. Travel between two properties divided by a public right of way and owned, operated, or controlled by the same person, will be considered on-site travel if: The travel crosses the right of way at a perpendicular intersection; or, the right of way is controlled by the property owner and is inaccessible to the public.

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

"Oral LD_{50}" means the single dosage in milligrams per kilogram (mg/kg) body weight, when orally administered, which, within 14 days, kills half a group of ten or more white rats each weighing between 200 and 300 grams.

"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 173-303-670 at a facility that contains other active dangerous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other dangerous waste management unit, while other units of the same facility continue to operate.

"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 which retains more than half of its initial activity after one year (365 days) in either a dark anaerobic or dark aerobic environment at ambient conditions.

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

"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 benzene rings. For purposes of this chapter, the PAHs of concern for designation are: Acenapthene, acenapthylene, 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.

"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.")

"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 ground water 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 ground water hydrology and related fields to make sound professional judgments regarding ground water 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.

"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 173-303-646 (1)(c), into the environment and includes the abandonment or discarding of barrels, containers, and other receptacles containing dangerous wastes or dangerous constituents and includes the definition of release at RCW 70.105D.020(10).

"Remediation waste" means all solid or dangerous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, which contain listed dangerous wastes, or which themselves exhibit a dangerous waste characteristic or criteria, that are managed for the purpose of implementing corrective action requirements imposed pursuant to WAC 173-303-646 (2) or (3). For a given facility, remediation wastes may originate only from within the facility boundary, except that remediation waste may include wastes managed in implementing corrective action in accordance with WAC 173-303-646 (2)(b) for releases extending beyond the facility boundary.

"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).

"Run-off" 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 wet-weight basis.

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

"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.

"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.

"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 dangerous wastes or dangerous wastes containing free liquids. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"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" or "TU" means a tank or container unit used temporarily for the treatment or storage of remediation waste, that is designated by the director pursuant to WAC 173-303-646(7) for the purpose of implementing the corrective action requirements of WAC 173-303-646 (2) or (3).

"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.

"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, and other similar areas where shipments of hazardous waste are held for ten days or less during the normal course of transportation.

"Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, 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 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.

"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.

"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 ground water to wells or springs. It includes lower aquifers that are hydraulically interconnected with this aquifer within the facility property boundary.

"Used oil" means oil that has been refined from crude oil, 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.

"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 ground water 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. 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.]

WAC 173-303-045 References to EPA's hazardous waste and permit regulations. Any references in this chapter to any parts, subparts, or sections from EPA's hazardous waste regulations, including 40 CFR Parts 260 through 280 and Part 124, are in reference to those rules as they existed on July 1, 1995. Copies of the appropriate referenced federal requirements are available upon request from the department.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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 173-303-060 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#). Any person who offers a dangerous waste to a transporter or to a dangerous waste TSD facility which does not have an EPA/state ID#, or whose EPA/state ID# has been cancelled or withdrawn, is in violation of this regulation.

(2) Every person who must have an EPA/state ID#, and who has not already received his ID#, must notify the department by obtaining and completing a Washington State Notification of Dangerous Waste Activities (Form 2) and submitting the completed form to the department. Any person already assigned an EPA/state ID# must notify the department of any changes to his company's name, mailing address, ownership, physical location, or type of dangerous waste activity, by submitting a revised Form 2. A revised Form 2 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. For changes of company name or mailing address, the generator may submit a corrected Registration Verification Report (part of the Dangerous Waste Annual Report) in lieu of a revised Form 2. 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 notification Form 2 must be submitted to the department. Notification of dangerous waste activities, Form 2 and instructions for its completion may be obtained by contacting the department.

(3) Any person with an EPA/state ID# may request that his ID# be withdrawn if he will no longer be handling dangerous waste at the site the ID# has been assigned to. Any person whose ID# has been withdrawn must notify the department before he uses the ID# at any later date. Notification must be in writing, except in the case of emergencies (e.g., fires, spills, etc.) such notification may be provided by telephone first, and followed within one week by a written notification. Withdrawal will only be granted when all applicable requirements of this chapter and chapter 173-305 WAC have been met.

(4) Any person with an EPA/state ID# may request that his ID# be cancelled if he will no longer occupy the site. Notification must be in writing. An EPA/state ID# 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 notification 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 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.

(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) 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 run-off. Precipitation run-off will not be considered a dangerous waste if it can be shown that the run-off has not been contaminated with the dangerous waste, or that the run-off is adequately addressed under existing state laws (e.g. chapter 90.48 RCW), or that the run-off does not exhibit any of the criteria or characteristics described in WAC 173-303-100.

(b) Materials that are reclaimed from solid wastes and that are used beneficially (as provided in WAC 173-303-016 and 173-303-017) are not solid wastes and hence are not dangerous wastes under this section unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.

(c) Notwithstanding subsections (1) and (2) of this section and 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; 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.

(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 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. Subsections (5)(a) and (c) of this section 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, must also be designated under the dangerous waste criteria, WAC 173-303-100, because designation under the criteria 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 extremely hazardous concentrations of halogenated hydrocarbons, they must use the dangerous waste numbers of D001 and WP01. 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 dangerous 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).

(c) For the purposes of this subsection, when aggregating waste quantities, generators must include in their calculation, dangerous wastes produced by on-site treatment or recycling of dangerous wastes and dangerous wastes being accumulated or stored except for the following categories of waste that are excluded from the quantity determinations.

(i) Dangerous waste that is recycled and that is excluded from regulation under WAC 173-303-120 (2)(a), (3)(c), (e),

or (f) is not included in the quantity determinations of this section and is not subject to any requirements of this subsection.

(ii) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.

(iii) Dangerous waste that is removed from on-site storage.

(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) 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 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 173-304 WAC (Minimum functional standards for solid waste handling), 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 to manage municipal or industrial solid waste in accordance with state or local regulations, or in accordance with another state's solid waste laws if the waste is sent out-of-state; or

(F) 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); 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 regulated if it is destined to be burned for energy recovery.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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 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 which are residues from or are generated by the management of household wastes (e.g., leachate, ash from burning of refuse-derived fuel) are not excluded by this provision. "Household wastes" means any waste material (including, 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);

(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 intended and used for structural and construction purposes (e.g., roads, dikes, paving) which are produced from mixtures of oil and sand, gravel, ash or similar substances;

(f) Roofing tars and shingles, except that these wastes are not excluded if mixed with wastes listed in WAC 173-303-081 or 173-303-082, or if they exhibit any of the characteristics specified in WAC 173-303-090;

(g) 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 which fails any state criteria, if the waste is generated by persons who utilize the arsenical-treated wood for the materials' intended end use.

(ii) Wood treated with other preservatives provided such treated wood is, within one hundred eighty days after becoming waste:

(A) Disposed of at a landfill that is permitted in accordance with WAC 173-304-460, minimum functional standards for solid waste handling, 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 WAC 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) Materials subjected to in-situ mining techniques which are not removed from the ground during extraction;

(j) Mining overburden returned to the mining site;

(k) Polychlorinated biphenyl (PCB) wastes:

(i) PCB wastes whose disposal is regulated by EPA under 40 CFR 761.60 (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 regulation 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 W001 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.

(l) Samples:

(i) Except as provided in (l)(ii) of this subsection, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this chapter, when:

(A) The sample is being transported to a lab for testing or being transported to the sample collector after testing; or

(B) The sample is being stored by the sample collector before transport, by the laboratory before testing, or by the laboratory after testing prior to return to the sample collector; or

(C) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action).

(ii) In order to qualify for the 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) Asbestos wastes or asbestos containing wastes which would be designated only as respiratory carcinogens by WAC 173-303-100, and any other inorganic wastes which are designated only under WAC 173-303-100 because they are respiratory carcinogens, if these wastes are managed in compliance with or in a manner equivalent to the asbestos management procedures of 40 CFR Part 61;

(n) Dangerous waste 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 (SIC codes 331 and 332), except that these wastes are not excluded if they exhibit one or more of the dangerous waste criteria (WAC 173-303-100) or characteristics (WAC 173-303-090);

(p) Wastes from burning any of the materials exempted from regulation by WAC 173-303-120 (2)(a)(v), (vi), (vii), (viii), or (ix). 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

(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.

(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 paper 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.

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.

(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; and

(ii) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

(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) 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:

(i) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

(ii) 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

(iii) The waste is typically and frequently managed in nonoxidizing environments.

(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.

Constituent	Maximum for any single composite sample-TCLP (mg/l)
Generic exclusion levels for K061 and K062 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
(2)Lead	0.15
Mercury	0.009
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
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/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).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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 state-wide 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 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

(l) 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; 173-303-145; 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 off-site 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 USC 6945(c)(1)(B).

(3) Approved facilities. Ecology will issue a list of landfills and transfer stations that meet the preceding qualifying criteria to aid generators who wish to dispose of their waste under the exclusion provided by this section.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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.

(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 173-303-081 Discarded chemical products. (1) A waste will be designated as a dangerous waste if it is handled in any of the manners described in (e) of this subsection, and if it is a residue from the management of:

(a) A commercial chemical product or manufacturing chemical intermediate which has the generic name listed in the discarded chemical products list, WAC 173-303-9903;

(b) An off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have the generic name listed in the discarded chemical products list, WAC 173-303-9903;

(c) Any containers, 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" 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 which 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 which caused the waste to be designated. If a person mixes a solid waste with a waste that would be designated as a discarded chemical product under this section, then the entire mixture must be designated. The mixture designation is the same as the designation for the discarded chemical product which was mixed with the solid waste. For example, a mixture containing 2.2 lbs. (1 kg) of Aldrin (dangerous waste number P004, 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. 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.

(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. 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. If a person mixes a solid waste with a waste that would be designated as a dangerous waste source under this section, then the entire mixture is designated as a dangerous waste source. 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. 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 ground water, surface water, or atmosphere.

(a) Generators will do one of the following:

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

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

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

(b) Cleaning requirements.

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

(A) The equipment to be cleaned;
(B) How the equipment will be cleaned;
(C) The solvent to be used in cleaning;
(D) How solvent rinses will be tested; and
(E) How cleaning residues will be disposed.
(ii) Equipment must be cleaned as follows:
(A) Remove all visible residues from process equipment;
(B) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.
(iii) Analytical requirements.
(A) Rinses must be tested in accordance with SW-846, Method 8290.
(B) "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, Table 1.
(iv) The generator must manage all residues from the cleaning process as F032 waste.
(c) Replacement requirements.
(i) Prepare and sign a written equipment replacement plan that describes:
(A) The equipment to be replaced;
(B) How the equipment will be replaced; and
(C) How the equipment will be disposed.
(ii) The generator must manage the discarded equipment as F032 waste.
(d) Documentation requirements. Document that previous equipment cleaning and/or replacement was performed in accordance with this section and occurred after cessation of use of chlorophenolic preservatives.
(3) The generator must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:
(a) The name and address of the facility;
(b) Formulations previously used and the date on which their use ceased in each process at the plant;
(c) Formulations currently used in each process at the plant;
(d) The equipment cleaning or replacement plan;
(e) The name and address of any persons who conducted the cleaning and replacement;
(f) The dates on which cleaning and replacement were accomplished;
(g) The dates of sampling and testing;
(h) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;
(i) A description of the tests performed, the date the tests were performed, and the results of the tests;
(j) The name and model numbers of the instrument(s) used in performing the tests;
(k) QA/QC documentation; and
(l) The following statement signed by the generator or his authorized representative: I certify under penalty of law that all process equipment required to be cleaned or replaced under WAC 173-303-083 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

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

WAC 173-303-090 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 D-93-79 or D-93-80, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78;

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

(iii) It is an ignitable compressed gas as defined in 49 CFR 173.300 and as determined by the test methods described in that regulation; or,

(iv) It is an oxidizer as defined in 49 CFR 173.151.

(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, using Method 9040 or 9041 in *Test Methods for Evaluating Solid Waste (SW 846), Physical/Chemical Methods,* available from the department;

(ii) It is liquid, and corrodes steel (SAE 1020) at a rate greater than 0.250 inch (6.35 mm) per year at a test temperature of 55 degrees C (130 degrees F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in *Test Methods for the Evaluation of Solid Waste, Physical/*

Chemical Methods. The NACE Standard is available from the department; or

(iii) It is solid or semi-solid, and when mixed with an equal weight of water results in a solution, the liquid portion of which has the property specified in (a)(i) of this subsection. Procedures for preparing and extracting the solution and liquid are described in the test procedures of WAC 173-303-110 (3)(a).

(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 173.51, or a Class A explosive as defined in 49 CFR 173.53, or a Class B explosive as defined in 49 CFR 173.88.

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

(8) Toxicity characteristic.

(a) A solid waste exhibits the toxicity characteristic if, using the *Toxicity Characteristic Leaching Procedure* (TCLP, found in Appendix II of 40 CFR Part 261, which is adopted by reference, or available upon request from the department) or equivalent methods approved by the department under WAC 173-303-110(5), 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 the TCLP, is considered to be the extract for the purpose of this subsection.

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

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

TOXICITY CHARACTERISTICS LIST:

Maximum Concentration of Contaminants for the Toxicity Characteristic

Dangerous Waste Number	Contaminant	(Chemical Abstracts Services #)	DW (mg/L)
D004	Arsenic	(7440-38-2)	5.0
D005	Barium	(7440-39-3)	100.0
D018	Benzene	(71-43-2)	0.5
D006	Cadmium	(7440-43-9)	1.0
D019	Carbon tetrachloride	(56-23-5)	0.5
D020	Chlordane	(57-74-9)	0.03
D021	Chlorobenzene	(108-90-7)	100.0
D022	Chloroform	(67-66-3)	6.0
D007	Chromium	(7440-47-3)	5.0
D023	o-Cresol	(95-48-7) /1/	200.0
D024	m-Cresol	(108-39-4) /1/	200.0
D025	p-Cresol	(106-44-5) /1/	200.0
D026	Cresol	/1/	200.0
D016	2,4-D	(94-75-7)	10.0
D027	1,4-Dichlorobenzene	(106-46-7)	7.5
D028	1,2-Dichloroethane	(107-06-2)	0.5
D029	1,1-Dichloroethylene	(75-35-4)	0.7
D030	2,4-Dinitrotoluene	(121-14-2) /2/	0.13
D012	Endrin	(72-20-8)	0.02
D031	Heptachlor (and its epoxide)	(76-44-8)	0.008
D032	Hexachlorobenzene	(118-74-1) /2/	0.13
D033	Hexachlorobutadiene	(87-68-3)	0.5
D034	Hexachloroethane	(67-72-1)	3.0
D008	Lead	(7439-92-1)	5.0
D013	Lindane	(58-89-9)	0.4
D009	Mercury	(7439-97-6)	0.2
D014	Methoxychlor	(72-43-5)	10.0
D035	Methyl ethyl ketone	(78-93-3)	200.0
D036	Nitrobenzene	(98-95-3)	2.0
D037	Pentachlorophenol	(87-86-5)	100.0
D038	Pyridine	(110-86-1) /2/	5.0
D010	Selenium	(7782-49-2)	1.0
D011	Silver	(7440-22-4)	5.0
D039	Tetrachloroethylene	(127-18-4)	0.7
D015	Toxaphene	(8001-35-2)	0.5
D040	Trichloroethylene	(79-01-6)	0.5
D041	2,4,5-Trichlorophenol	(95-95-4)	400.0
D042	2,4,6-Trichlorophenol	(88-06-2)	2.0
D017	2,4,5-TP (Silvex)	(93-72-1)	1.0
D043	Vinyl chloride	(75-01-4)	0.2

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

/2/ Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

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

DE-85-10), § 173-303-090, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-090, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-090, filed 2/10/82.]

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

(a) Toxic dangerous wastes; and

(b) Persistent dangerous wastes.

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

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

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

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

(4) Quantity exclusion limit. A solid waste is a dangerous waste if it meets one or more of the dangerous waste criteria described in subsections (5)and (6) of this section. If a person's solid waste meets one or more of these criteria then he or she is a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the quantity of the waste exceeds the following quantity exclusion limits:

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

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

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

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

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

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

TOXIC CATEGORY TABLE

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

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

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

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

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

where Σ(X,A,B,C, or D)% is the sum of all the concentration percentages for a particular toxic category.

Example 1. A person's waste contains: Aldrin (X Category) - .01%; Endrin (B Category) - 1%; Benzene (C Category) - 4%; Phenol (C Category) - 2%; Cyclohexane (C Category) - 5%; Water (nontoxic) - 87%. The equivalent concentration (E.C.) would be:

$$\text{E.C. }(\%) = 0.01\% + \frac{0\%}{10} + \frac{1\%}{100} + \frac{(4\% + 2\% + 5\%)}{1000} + \frac{0\%}{10{,}000}$$

$$= 0.01\% + 0\% + 0.01\% + 0.011\% + 0\% = 0.031\%$$

So the equivalent concentration equals .031%.

(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 0.031% (from Example 1. above) is greater than 0.001% and less than 0.1%. The waste is DW and the dangerous waste number WT02 must be assigned. Since 0.031% is also greater than 0.01%, the waste is not a special waste.

(iv) Reserve.

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

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

(ii) The EHW and special waste bioassay. To determine if a waste is EHW, a person must establish the toxicity category range of a waste by means of the fish bioassay at 10 mg/L or the rat bioassay at 50 mg/L, 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 proposed 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/L 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 hydrocarbons (HH), 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 the chemical testing methods for complying with the dangerous waste regulation 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 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 hydrocarbons (HH) for which the concentrations are known, the total halogenated hydrocarbon concentration must be determined by summing the concentration percentages for all of the halogenated hydrocarbons for which the concentrations are known.

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

Total HH 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 hydrocarbons and/or polycyclic aromatic hydrocarbons must determine its designation from the persistent dangerous waste table or persistent dangerous waste criteria graph WAC 173-303-9907.

PERSISTENT DANGEROUS WASTE TABLE

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

* No DW concentration level for PAH.

(7) Reserve.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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 173-303-104 Generic dangerous waste numbers. (1) Purpose. This section sets forth the dangerous waste number for each of the dangerous waste criteria designations.

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

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

GENERIC DANGEROUS WASTE NUMBERS TABLE

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

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

WAC 173-303-110 Sampling and testing methods. (1) Purpose. This section sets forth the testing methods to be used in the process of designating a dangerous waste or of complying with the air emission standards in WAC 173-303-690 and 173-303-691. 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.

(2) Representative samples.

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

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

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

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

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

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

(vi) Containerized liquid wastes - "COLIWASA" described in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,* SW-846, revised July 1982, as amended by Update 1 (April 1984) and Update 2 (April 1985); and,

(vii) Liquid waste in pits, ponds, lagoons, and similar reservoirs - "Pond Sampler" described in *Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods,* SW-846, revised July 1982, as amended by Update 1 (April 1984) and Update 2 (April 1985).

(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
1916 Race Street
Philadelphia, PA 19103.

(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 and 40 CFR Part 261:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

For copies of ASTM methods:

ASTM
1916 Race Street
Philadelphia, PA 19103

For copies of APTI methods:

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

The document titles and included test procedures are as follows:

(a) *Chemical Testing Methods for Complying with the state of Washington Dangerous Waste Regulation,* March 1982, revised July 1983, March 1984, and May 1993 describing methods for testing:

(i) Ignitability;

(ii) Corrosivity, including the addendum, *Test Method for Determining pH of Solutions in Contact with Solids,* March 1984;

(iii) Reactivity;

(iv) Toxicity characteristic leaching procedure;

(v) Halogenated hydrocarbons; and

(vi) Polycyclic aromatic hydrocarbons;

(b) *Biological Testing Methods,* the latest revision, describing procedures for:

(i) Static acute fish toxicity test; and

(ii) Acute oral rat toxicity test;

(c) *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846* (Third Edition, November, 1986 as amended by Updates I (July, 1992), II (September, 1994),

IIA (August, 1993), IIB (January, 1995), and III) is adopted by reference. This includes, among others:

(i) Method 9095 (Paint Filter Liquids Test), demonstrating the absence or presence of free liquids in either a containerized or bulk waste.

(ii) Reserved.

(d) 40 CFR Part 261 Appendix X is adopted by reference for the purpose of analysis for chlorinated dibenzo-p-dioxins and dibenzofurans;

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

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

(f) 40 CFR Part 261 Appendix III *Chemical Analysis Test Methods*, which lists sampling and analysis methods contained in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846,* and 40 CFR Part 261 Appendix II, *Method 1311 Toxicity Characteristic Leaching Procedure* are adopted by reference.

(g) The following publications for air emission standards are incorporated by reference.

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

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

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

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

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

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

(vii) ASTM Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteriscope, ASTM Standard D 2879-86.

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

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

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

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

WAC 173-303-120 Recycled, reclaimed, and recovered wastes. (1) This section describes the requirements for persons who recycle materials that are solid wastes and dangerous. Except as provided in subsections (2) and (3) of this section, dangerous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of subsection (4) of this section. Dangerous wastes that are recycled will be known as "recyclable materials."

(2)(a) The following recyclable materials are solid wastes and sometimes are dangerous wastes. However, they are subject only to the requirements of (b) of this subsection, WAC 173-303-050, 173-303-145 and 173-303-960:

(i) Industrial ethyl alcohol that is reclaimed;

(ii) Used batteries (or used battery cells) returned to a battery manufacturer for regeneration;

(iii) Used oil that exhibits one or more of the characteristics or criteria of dangerous waste and is recycled in some manner other than:

(A) Being burned for energy recovery; or

(B) Being used in a manner constituting disposal;

(iv) Scrap metal;

(v) Fuels produced from the refining of oil-bearing dangerous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices;

(vi) Oil reclaimed from dangerous waste resulting from normal petroleum refining, production, and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility;

(vii) Coke and coal tar from the iron and steel industry that contains dangerous waste from the iron and steel production process;

(viii)(A) Dangerous waste fuel produced from oil-bearing dangerous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such dangerous wastes, where such dangerous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under WAC 173-303-515 (1)(d) and so long as no other dangerous wastes are used to produce the dangerous waste fuel;

(B) Dangerous waste fuel produced from oil-bearing dangerous waste from petroleum refining production, and transportation practices, where such dangerous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under WAC 173-303-515 (1)(d); and

(C) Oil reclaimed from oil-bearing dangerous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under WAC 173-303-515 (1)(e); and

(ix) Petroleum coke produced from petroleum refinery dangerous wastes containing oil at the same facility at which such wastes were generated, unless the resulting coke product exhibits one or more of the characteristics of dangerous waste in WAC 173-303-090.

(b) Any recyclable material listed in (a) of this subsection will be subject to the applicable requirements listed in subsection (4) of this section if the department determines, on a case-by-case basis, that:

(i) It is being accumulated, used, reused, or handled in a manner that poses a threat to public health or the environment; or

(ii) Due to the dangerous constituent(s) in it, any use or reuse would pose a threat to public health or the environment. Such recyclable material will be listed in WAC 173-303-016(6).

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

(a) Recycling requirements for state-only dangerous wastes (see WAC 173-303-500);

(b) Recyclable materials used in a manner constituting disposal (see WAC 173-303-505);

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

(d) Dangerous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under Subpart O of 40 CFR Part 265 or WAC 173-303-670 (see WAC 173-303-510);

(e) Used oil that is burned for energy recovery in boilers and industrial furnaces that are not regulated under Subpart O of 40 CFR Part 265 or WAC 173-303-670, if such used oil:

(i) Exhibits one or more of the characteristics of a dangerous waste; or

(ii) Is designated as DW solely through WAC 173-303-100; or

(iii) Is designated solely as W001, (see WAC 173-303-515);

(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).

(4) Those recycling processes not specifically discussed in subsections (2) and (3) of this section are generally subject to regulation only up to and including storage prior to recycling. For the purpose of this section, recyclable materials received from off-site will be considered stored unless they are moved into an active recycling process within twenty-four hours after being received. An active recycling process refers to a dynamic recycling operation that occurs within a recycling unit such as a distillation or centrifuge unit. The phrase does not refer to passive storage-like activities that occur, for example, when tanks or containers are used for phase separation or for settling impurities. Passive storage-like activities are not eligible for the recycling exemption under this subsection.

The recycling process itself is generally exempt from permitting unless the department determines, on a case-by-case basis, that the recycling process poses a threat to public health or the environment.

Unless specified otherwise in subsections (2) and (3) of this section:

(a) Generators of recyclable materials are subject to all applicable requirements of this chapter including, but not limited to, WAC 173-303-170 through 173-303-230;

(b) Transporters of recyclable materials are subject to all applicable requirements of this chapter including, but not limited to, WAC 173-303-240 through 173-303-270;

(c) Owners or operators of facilities that receive recyclable materials from off-site and recycle these recyclable materials without storing them before they are recycled are subject to the following requirements:

(i) WAC 173-303-060,

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

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

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

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

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

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

(d) Owners or operators of facilities that store recyclable materials before they are recycled are subject to the following requirements including, but not limited to:

(i) For all recyclers, the applicable provisions of:

(A) WAC 173-303-280 through 173-303-395,

(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 and 173-303-691 (Air emission standards for process vents and equipment leaks) for final status facilities, and 40 CFR Part 265 Subparts AA and BB, incorporated by reference at WAC 173-303-400(3) for interim status facilities.

(5) Use of the used oil recycling statute, chapter 70.95I RCW. This subsection applies to persons who use or manage used oil as defined under chapter 70.95I RCW and its implementing regulations, as amended. The department requires persons who use or manage used oils to do so in accordance with chapter 70.95I RCW and its implementing regulations, as amended.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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 173-303-140 Land disposal restrictions. (1) Purpose.

(a) The purpose of this section is to encourage the best management practices for dangerous wastes according to the priorities of RCW 70.105.150 which are, in order of priority:

(i) Reduction;

(ii) Recycling;

(iii) Physical, chemical, and biological treatment;

(iv) Incineration;

(v) Stabilization and solidification; and

(vi) Landfill.

(b) This section identifies dangerous wastes that are restricted from land disposal, describes requirements for restricted wastes, and defines the circumstances under which a prohibited waste may continue to be land disposed.

(c) For the purposes of this section, the term "landfill," as stated in the priorities of RCW 70.105.150, will be the same as the term "land disposal." Land disposal will be used in this section to identify the lowest waste management priority.

(2) Applicability.

The land disposal restrictions of this section apply to any person who owns or operates a dangerous waste treatment, storage, or disposal facility in Washington state and to any person who generates or transports dangerous waste.

(a) Land disposal restrictions for wastes designated in accordance with WAC 173-303-070 (3)(a)(i), (ii), and (iii) are the restrictions set forth by the Environmental Protection Agency in 40 CFR Part 268 which are incorporated by reference into this regulation and the restrictions set forth in subsections (3) through (7) of this section. The words "regional administrator" (in 40 CFR) will mean the "department." The exemption and exception provisions of subsections (3) through (7) are not applicable to the federal land disposal restrictions.

(b) Land disposal restrictions for state-only dangerous waste are the restrictions set forth in subsections (3) through (7) of this section.

(3) Definitions.

When used in this section the following terms have the meaning provided in this subsection. All other terms have the meanings given under WAC 173-303-040.

(a) "Dangerous waste constituents" means those constituents listed in WAC 173-303-9905 and any other constituents which have caused a waste to be a dangerous waste under this chapter.

(b) "Land disposal" means placement in a facility or on the land with the intent of leaving the dangerous waste at closure, and includes, but is not limited to, placement for disposal purposes in a: Landfill; surface impoundment; waste pile; injection well; land treatment facility; salt dome or salt bed formation; underground cave or mine; concrete vault or bunker.

(c) "Organic/carbonaceous waste" means a dangerous waste that contains combined concentrations of greater than ten percent organic/carbonaceous constituents in the waste; organic/carbonaceous constituents are those substances that contain carbon-hydrogen, carbon-halogen, or carbon-carbon chemical bonding.

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

(e) "Stabilization" and "solidification" mean a technique that limits the solubility and mobility of dangerous waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes the waste by bonding or chemically reacting with the stabilizing material.

(4) Land disposal restrictions and prohibitions. The land disposal requirements of this subsection apply to land disposal in Washington state.

(a) Disposal of extremely hazardous waste (EHW). No person may land dispose of EHW, except as provided in subsection (5) of this section, at any land disposal facility in the state. No person may land dispose of EHW at the facility established under RCW 70.105.050, except as provided by subsections (5), (6), and (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process EHW to remove or reduce its harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(b) Disposal of liquid waste. Special requirements for bulk and containerized liquids.

(i) Effective May 8, 1985, the placement of bulk or noncontainerized liquid hazardous waste or hazardous 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 No. SW-846.)

(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, cross-linked allylstyrene and tertiary butyl copolymers). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or

(III) Mixtures of these nonbiodegradable materials.

(B) Tests for nonbiodegradable sorbents.

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

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

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

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

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

(c) Disposal of solid acid waste. No person may land dispose solid acid waste, except as provided in subsections (5), (6), or (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(d) Disposal of organic/carbonaceous waste.

(i) No person may land dispose organic/carbonaceous waste, except as provided in subsections (5), (6), or (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter. Organic/carbonaceous wastes must be incinerated as a minimum management method according to the dangerous waste management priorities as defined in subsection (1)(a) of this section.

(ii) This prohibition against the land disposal of organic/carbonaceous waste does not apply to black mud generated from the caustic leach recovery of cryolite at primary aluminum smelting plants.

(iii) This prohibition against the land disposal of organic/carbonaceous waste does not apply to any person who certifies to the department that recycling, treatment and incineration facilities are not available within a radius of one thousand miles from Washington state's borders. Such certification must be sent to the department by certified mail and must include: The name, address and telephone number of the person certifying; a brief description of the organic/carbonaceous waste covered by the certification; a discussion of the efforts undertaken to identify available recycling, treatment and incineration facilities; and the signature of the person responsible for the certification and development of information used to support the certification. Records and information supporting the certification must be retained by the certifying person and must be made available to the department upon request.

A certification that has been properly submitted to the department will remain valid until the department determines that a recycling, treatment or incineration facility is available within a radius of one thousand miles from Washington state's borders and the person who submitted the certification is unable to demonstrate otherwise. A recycling, treatment or incineration facility will be considered by the department to be available if such facility: Is operating, and; can safely and legally recycle, treat or incinerate the organic/carbonaceous waste, and; has sufficient capacity to receive and handle significant amounts of the waste, and; agrees to accept the waste.

(5) Treatment in land disposal facilities. The land disposal restrictions in subsection (4) of this section do not apply to persons treating dangerous wastes in surface impoundments, waste piles, or land treatment facilities provided that such treatment is performed in accordance with the requirements of this subsection and this chapter.

(a) Surface impoundment treatment.

Liquid waste, extremely hazardous waste (EHW), solid acid waste, and organic/carbonaceous waste may be placed in surface impoundments for purposes of treatment provided the owner/operator can demonstrate that effective treatment of the dangerous waste constituents will occur and at closure the owner/operator complies with the prohibitions and restrictions of subsection (4) of this section.

(b) Waste pile treatment.

Liquid waste, extremely hazardous waste (EHW), solid acid waste, and organic/carbonaceous waste may be placed in waste piles for purposes of treatment provided the owner/operator can demonstrate that effective treatment of dangerous waste constituents will occur and that at closure the

owner/operator will be in compliance with the prohibitions and restrictions of subsection (4) of this section.

(c) Land treatment.

Liquid waste, extremely hazardous waste (EHW), and organic/carbonaceous waste may be land treated provided that the owner/operator can demonstrate that effective treatment of dangerous waste constituents will occur, and at the end of the post-closure care period the owner/operator will be in compliance with subsection (4) of this section.

(6) Case-by-case exemptions to a land disposal prohibition. Any person may petition the department for an exemption from a prohibition in subsection (4) of this section for the land disposal of a dangerous waste. The procedures to submit a petition to the department are specified in WAC 173-303-910(6). The department may deny any petition if it determines that there is a potential for dangerous waste constituents to migrate from the land disposal facility where the waste is to be placed. The department will deny any petition when exemption would result in a substantial or imminent threat to public health or the environment. The department will deny any petition when exemption would result in a violation of applicable state laws.

The department may grant an exemption from the prohibitions and restrictions of subsection (4) of this section based on the demonstrations specified in (a), (b) or (c) of this subsection.

(a) Land disposal exemption for treatment residuals. Any person may request an exemption from a land disposal prohibition in subsection (4) of this section for treatment residuals by demonstrating to the department that:

(i) The person has applied the best achievable management method to the original waste; and

(ii) Application of additional management methods to the treatment residuals would prevent the person from utilizing the best achievable management methods for the original dangerous waste; and

(iii) The land disposal of the treatment residuals does not pose a greater risk to the public health and the environment than land disposal of the original dangerous waste would pose.

(b) Economic hardship exemption. Any person may request an exemption from a prohibition in subsection (4) of this section for the land disposal of a dangerous waste by demonstrating to the department that alternative management of the dangerous waste will impose an unreasonable economic burden in relation to the threat of harm to public health and the environment. It will be solely within the discretion of the department to approve or deny the requests for exemptions based on economic hardship.

(c) Organic/carbonaceous waste exemption. Any person may request an exemption from the requirements in subsection (4) of this section by demonstrating to the department that:

(i) Alternative management methods for organic/carbonaceous waste are less protective of public health and the environment than stabilization or landfilling; or

(ii)(A) The organic/carbonaceous waste has a heat content less than 3,000 BTU/LB or contains greater than sixty-five percent water or other noncombustible moisture; and

(B) Incineration is the only management method available within a radius of one thousand miles from Washington state's border (i.e., recycling or treatment are not available).

(7) Emergency cleanup provision. The department may, on a case-by-case basis, grant an exception to the land disposal restrictions in subsection (4) of this section for an emergency cleanup where an imminent threat to public health and the environment exists. Any exception will require compliance with applicable state law and will require (consistent with the nature of the emergency and imminent threat) application of the waste management priorities of RCW 70.105.150.

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

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

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

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

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

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

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

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

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

WAC 173-303-145 Spills and discharges into the environment. (1) Purpose and applicability. This section sets forth the requirements for any person responsible for a spill or discharge of a dangerous waste or hazardous substance into the environment, except when such release is otherwise permitted under state or federal law. For the

purposes of complying with this section, a transporter who spills or discharges dangerous waste or hazardous substances during transportation will be considered the responsible person. This section applies when any dangerous waste or hazardous substance is intentionally or accidentally spilled or discharged into the environment (unless otherwise permitted) such that human health or the environment is threatened, regardless of the quantity of dangerous waste or hazardous substance.

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

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

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

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

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

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

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

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

(b) Where immediate removal or temporary storage of spilled or discharged dangerous wastes or hazardous substances is necessary to protect human health or the environment, the department may direct that removal be accomplished without a manifest, by transporters who do not have EPA/state identification numbers.

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

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

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

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

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

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

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

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

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

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

(b) If the container or inner liner held acutely hazardous waste, as defined in WAC 173-303-040, toxic EHW as defined in WAC 173-303-100 or pesticides bearing the

danger or warning label, the container or inner liner has been rinsed at least three times with an appropriate cleaner or solvent. The volume of cleaner or solvent used for each rinsing must be ten percent or more of the container's or inner liner's capacity or of sufficient quantity to thoroughly decontaminate the container. In lieu of rinsing for containers that might be damaged or made unusable by rinsing with liquids (e.g., 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 (e.g., 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.

Any rinsate or vacuumed residue which 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 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. Otherwise, the rinsate must be checked against the designation requirements (WAC 173-303-070 through 173-303-100) and, if designated, managed according to the requirements of this chapter.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(C) Excessive noise;

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

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

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

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

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

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

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

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

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

(d) Item I, and R if the continuation sheet 8700-22A is used - The dangerous waste number (e.g., F001, D006, WT02, P102) must be provided in this space for each corresponding waste entered and described under Item 11, and 28 if the continuation sheet 8700-22A is used. As discussed in subsection (5) of this section, dangerous waste numbers WL01 or WL02 may be used in this space for labpacks;

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

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

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

(3) Manifest procedures.

(a) The generator must:

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

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

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

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

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

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

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

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

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

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

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

tor, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

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

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

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

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

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

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

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

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

(3) Marking. The generator must:

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

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

> HAZARDOUS WASTE - State and federal law prohibits improper disposal. If found, contact the nearest police or public safety authority, and the Washington state department of ecology or the United States Environmental Protection Agency.
>
> Generator's Name and Address
>
> . . . . . .
>
> . . . . . .
>
> . . . . . .
>
> Manifest Document Number
>
> . . . . . .

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

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

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

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

(b)(i) The waste is placed in containers and the generator complies with WAC 173-303-630 (2), (3), (4), (5), (6), (8), (9), and (10). 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); or

(ii) The waste is placed in tanks and the generator complies with WAC 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); or

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

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

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

(iv) The waste is placed in containment buildings and the generator complies with 40 CFR Part 265 Subpart DD, which is incorporated by reference, and the generator has placed its professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101 in the facility's operating record no later than sixty days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit. The owner or operator shall maintain the following records at the facility:

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

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

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

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

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

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

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

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

(f) The generator complies with 40 CFR 268.7(a)(4) (waste analysis plan when treating waste to meet treatment standards for land disposal restrictions).

(2) Satellite accumulation.

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

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

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

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

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

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

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

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

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

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

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

(2) For purposes of accumulating dangerous waste on-site, persons who generate per month and accumulate on-site less than 2200 pounds (1000 kg) per month of dangerous waste are subject to all applicable provisions of WAC 173-303-200 except as follows:

(a) In lieu of the ninety-day accumulation period, dangerous wastes may be accumulated for one hundred eighty days or less. The department may, on a case-by-case basis, grant a maximum ninety-day extension to this one hundred eighty-day period if the generator must transport his waste, or offer his waste for transportation, over a distance of two hundred miles or more for off-site treatment, storage, or disposal, and the dangerous wastes must remain on-site due to unforeseen, temporary and uncontrollable circumstances;

(b) The generator need not comply with WAC 173-303-330 (Personnel training);

(c) In lieu of the contingency plan and emergency procedures required by WAC 173-303-350 and 173-303-360, the generator must comply with the following:

(i) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in (c)(iv) of this subsection. This employee is the emergency coordinator.

(ii) The generator must post the following information next to all emergency communication devices (including telephones, two-way radios, etc.):

(A) The name and telephone number of the emergency coordinator;

(B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and

(C) The telephone number of the fire department, unless the facility has a direct alarm.

(iii) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(iv) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

(A) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

(B) In the event of a spill, contain the flow of dangerous waste to the extent possible, and as soon as is practicable, clean up the dangerous waste and any contaminated materials or soil;

(C) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached waters of the state, the generator must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their twenty-four hour toll free number 800/424-8802). The report must include the following information:

(I) The name, address, and EPA/state identification number of the generator;

(II) Date, time, and type of incident (e.g., spill or fire);

(III) Quantity and type of hazardous waste involved in the incident;

(IV) Extent of injuries, if any; and

(V) Estimated quantity and disposition of recovered materials, if any;

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

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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 173-303-210 Generator recordkeeping. (1) The generator must keep a copy of each manifest signed by the initial transporter in accordance with WAC 173-303-180(3), manifest procedures, for three years, or until he receives a signed copy from the designated facility which received the waste. The signed facility copy must be retained for at least five years from the date the waste was accepted by the initial transporter.

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

(3) Waste designation records.

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

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

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

(ii) The laboratory performing the test;

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

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

(4) Any other records required for generators accumulating wastes on-site as described in WAC 173-303-170 (4)(b) or 173-303-200 must be retained for at least five years, including, but not limited to such items as inspection logs.

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

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

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

WAC 173-303-220 Generator reporting. The generator must submit the following reports to the department by the specified due date for each report, or within the time period allowed for each report.

(1) Annual reports.

(a) A generator or any person who has obtained an EPA/state identification number pursuant to WAC 173-303-060 must submit an annual report to the department, on the Dangerous Waste Annual Report according to the instructions on the form (copies are available from the department), no later than March 1 for the preceding calendar year.

(b) In addition, any generator who stores, treats, or disposes of dangerous waste on-site must comply with the annual reporting requirements of WAC 173-303-390, Facility reporting.

(2) Exception reports.

(a) A generator who does not receive a copy of the manifest with the handwritten signature of the owner/operator of the designated facility within thirty-five days of the date the waste was accepted by the initial transporter must contact the transporter(s) and/or facility to determine the status of the dangerous waste shipment.

(b) A generator must submit an exception report to the department if he has not received a copy of the manifest with the handwritten signature of the owner/operator of the designated facility within forty-five days of the date the waste was accepted by the initial transporter.

(c) The exception report must include:

(i) A legible copy of the manifest for which the generator does not have confirmation of delivery; and

(ii) A cover letter signed by the generator or his representative explaining the efforts taken to locate the waste and the results of those efforts.

(d) The department may require a generator to submit exception reports in less than forty-five days if it finds that the generator frequently or persistently endangers public health or the environment through improper waste shipment practices.

(3) Additional reports. The director, as he deems necessary under chapter 70.105 RCW, may require a generator to furnish additional reports (including engineering reports, plans, and specifications) concerning the quantities and disposition of the generator's dangerous waste.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-220, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-220, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-220, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-220, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-220, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-220, filed 2/10/82.]

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

Federal export requirements, administered by EPA, are set forth at 40 CFR 262 Subpart E and 40 CFR 261.5, 261.6, 262.41, and 263.20 and specify the procedures applicable to generators 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.

(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. 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) Transporters must comply with the requirements of WAC 173-303-060, Notification and identification numbers. Transporters who are involved in interstate transport must use the identification number assigned to their national headquarters office, unless the department requires, on a case-by-case basis, that a transporter obtain his own unique EPA/state ID#. Transporters who are involved only in intrastate transport must use the identification number assigned to their headquarters office located within the state. Transporters who must comply with the generator requirements as a result of a spill at a terminal or during transport must obtain a separate generator EPA/state ID# for such spill or terminal.

(2) Any person who transports a dangerous waste must comply with the requirements of WAC 173-303-240 through 173-303-270, when such dangerous waste is required to be manifested by WAC 173-303-180.

(3) 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.

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

(5) Transporters may store at a transfer facility manifested shipments of dangerous waste in containers meeting the requirements of WAC 173-303-190 (1), (2), and (3) for ten days or less. Transporters may not accumulate or store

manifested shipments of dangerous waste for more than ten days. Reference to WAC 173-303-200 in 173-303-240(3) does not constitute authority for storage in excess of ten days for transporters. Transporters who do not comply with these conditions are subject to all applicable TSD facility requirements.

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

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

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

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

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

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

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

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

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

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

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

(c) The next designated transporter; or

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-250, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-250, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW

70.95.260. 82-05-023 (Order DE 81-33), § 173-303-250, filed 2/10/82. Formerly WAC 173-302-220 and 173-302-230.]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WAC 173-303-280 General requirements for dangerous waste management facilities. (1) Applicability. The requirements of WAC 173-303-280 through 173-303-395 apply to all owners and operators of facilities which store, treat, or dispose of dangerous wastes and which must be permitted under the requirements of this chapter 173-303 WAC, unless otherwise specified in this chapter. Whenever a shipment of dangerous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements for generators, WAC 173-303-170 through 173-303-230.

(2) Imminent hazard. Notwithstanding any provisions of this chapter, enforcement actions may be brought in the event that the management practices of a facility present an imminent and substantial hazard to the public health and the environment, regardless of the quantity or concentration of a dangerous waste.

(3) Identification numbers. Every facility owner or operator must apply for an EPA/state identification number from the department in accordance with WAC 173-303-060.

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

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

WAC 173-303-281 Notice of intent. (1) Purpose. The purpose of this section is to provide notification to the department, local communities and the public that the siting of a dangerous waste management facility is being considered. Also, to provide general information about the proposed facility owner/operator, the type of facility and the types of wastes to be managed and compliance with the siting criteria.

(2) Applicability. This section applies to owners/operators of proposed facilities. This section also applies to existing facilities for which the department receives an application for expansion. 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 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. As used in this section:

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

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

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

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

(a) The notice of intent to be prepared by the owners/operators of the applicable facilities must consist of:

(i) The name, address, and telephone number of the owner, operator, and corporate officers;

(ii) The location of the proposed facility or expansion on a topographic map with specifications as detailed in WAC 173-303-806 (4)(a)(xviii);

(iii) A brief description of the types and amounts of wastes to be managed annually;

(iv) A brief description of the major equipment items proposed, if any, and the waste management activities requiring a permit or revision of an existing permit;

(v) Demonstration of compliance with the siting criteria as required under WAC 173-303-282 (6) and (7). The site conditions with regards to satisfying the criteria are to be assessed as of the date of submittal of the notice of intent to the department;

(vi) For informational purposes a complete summary of compliance violations of permit conditions at hazardous waste management facilities owned or operated by the applicant, its subsidiaries or its parent company, during the ten calendar years preceding the permit application. Along with the summary of compliance violations, as issued by appropriate state or federal regulatory agencies, the applicant must also submit responses to past violations and any written correspondence with regulatory agencies regarding the compliance status of any hazardous waste management facility owned or operated by the applicant, its subsidiaries or parent company of the owner or operator. A more detailed compliance record must be provided upon request by the department;

(vii) For informational purposes the need for the proposed facility or expansion must be demonstrated by one of the following methods:

(A) Current overall capacity within Washington is inadequate for dangerous wastes generated in Washington as determined by regional or state dangerous waste management plans; or

(B) The facility is a higher priority management method, as described in RCW 70.105.150, than is currently in place or practical and available for the types of waste proposed to be managed; or

(C) The facility will add to the types of technology available or will reduce cost impacts (not to include transportation costs) to Washington generators for disposal of dangerous wastes; and

(ix) For informational purposes it must be shown how the capacity of the proposed facility or expansion will affect the overall capacity within the state, in conjunction with existing facilities in Washington.

(b) The notice of intent must be filed with the department, and copies must be made available for public review, no less than one hundred fifty days prior to filing an application for a permit or permit revision. Public notification of the notice of intent to file shall be given at the time of filing by announcement in a daily newspaper within the area of the proposed facility or expansion for a minimum of fourteen consecutive days. In addition, 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.

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

WAC 173-303-282 Siting criteria. (1) **Purpose.** This section establishes siting criteria which serve as an initial screen in the consideration of sites for dangerous waste management facilities. The purpose of the siting criteria is to immediately disqualify proposed dangerous waste facility sites in locations considered unsuitable or inappropriate for the management of dangerous wastes. Under RCW 70.105.200 (1)(d), siting criteria cannot prevent existing dangerous waste management facilities from operating at or below their present level of activity.

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

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

(2) **Applicability.**

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

(i) Owners/operators of proposed facilities; and

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

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

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

(b) This section does not apply to:

(i) Owners/operators of facilities or portions of facilities who are applying for research, development and demonstration permits, pursuant to section 3005(g) of the Resource Conservation and Recovery Act, codified in 40 CFR Part 270.65 or WAC 173-303-809;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(e) "Expansion" means the enlargement of the land surface area of an existing facility from that described in an interim status permit application or final facility permit, the addition of a new dangerous waste management process, or an increase in overall design capacity of existing dangerous waste management processes at a facility. However, a process or equipment change within the existing handling code (not to include "other") as defined under WAC 173-303-380 (2)(d) will not be considered a new dangerous waste management process.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(4) **Implementation.**

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

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

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

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

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

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

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

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

(i) For land-based facilities and incinerators:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) Incineration facilities may not be located in a Class I Prevention of Significant Deterioration Air Quality Zone designated under the Federal Clean Air Act.

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

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

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

(i) Surface water.

(A) Flood, seiche, and tsunami protection.

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

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

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

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

(B) Perennial surface water bodies.

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

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

(C) Surface water supply.

(I) No dangerous waste management facility may be located in a watershed identified in the report submitted to, and approved by, the department of health under the authority of WAC 248-54-225(3), Watershed control.

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

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

(ii) Ground water. To the extent feasible, proponents of land-based facilities should seek sites with natural site characteristics which are capable of providing protection of ground water resources. Natural features such as low 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 ground water protection program, WAC 173-303-806 (4)(a)(xxi), during the permitting process.

(A) Depth to ground water.

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

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

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

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

(D) Ground water intakes.

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

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

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

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

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

(A) Wetlands;

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

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

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

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

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

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

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

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

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

(a) Adjacent land use.

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

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

(b) Special land uses.

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

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

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

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

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

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

(c) Residences and public gathering places.

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

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

(d) Land use compatibility. Owners/operators of nonpreempted facilities must conform with local land use

zoning designation requirements, as approved by the department under chapter 70.105 RCW.

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

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

WAC 173-303-283 Performance standards. (1) Purpose. This section provides general performance standards for designing, constructing, operating, and maintaining dangerous waste facilities.

(2) Applicability. This section applies to all dangerous waste facilities permitted under WAC 173-303-800 through 173-303-840. These general performance standards must be used to determine whether more stringent facility standards should be applied than those spelled out in WAC 173-303-280, 173-303-290 through 173-303-400 and 173-303-600 through 173-303-670.

(3) Performance standards. Unless authorized by state, local, or federal laws, or unless otherwise authorized in this regulation, the owner/operator must design, construct, operate, or maintain a dangerous waste facility that to the maximum extent practical given the limits of technology prevents:

(a) Degradation of ground water quality;

(b) Degradation of air quality by open burning or other activities;

(c) Degradation of surface water quality;

(d) Destruction or impairment of flora and fauna outside the active portion of the facility;

(e) Excessive noise;

(f) Conditions that constitute a negative aesthetic impact for the public using rights of ways, or public lands, or for landowners of adjacent properties;

(g) Unstable hillsides or soils as a result of trenches, impoundments, excavations, etc.;

(h) The use of processes that do not treat, detoxify, recycle, reclaim, and recover waste material to the extent economically feasible; and

(i) Endangerment of the health of employees, or the public near the facility.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(3) The owner or operator of an off-site facility must confirm, by analysis if necessary, that each dangerous waste received at the facility matches the identity of the waste specified on the accompanying manifest or shipping paper.

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

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

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

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

(a) The parameters for which each dangerous waste, or nondangerous waste if applicable under WAC 173-303-610 (4)(d), will be analyzed, and the rationale for selecting these parameters;

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

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

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

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

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

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

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

(i) The sampling of impoundment contents;

(ii) The analysis of test data; and

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

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

(B) Where no treatment standards have been established;

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

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

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

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

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

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

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

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

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

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

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

(2) A facility must have:

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

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

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

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

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

WAC 173-303-320 General inspection. (1) The owner or operator must inspect his facility to prevent mal-

functions and deterioration, operator errors, and discharges which may cause or lead to the release of dangerous waste constituents to the environment, or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

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

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

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

(c) The schedule must indicate the frequency of inspection for specific items. The frequency should be based on the rate of possible deterioration of equipment, and the probability of an environmental or human health incident. Areas subject to spills must be inspected daily when in use. At a minimum the inspection schedule must also include the applicable items and frequencies required for the specific waste management methods described in 40 CFR Part 265 Subparts F through R, 265.1033, 265.1052, 265.1053, and 265.1058, for interim status facilities and in WAC 173-303-630 through 173-303-680, and 40 CFR 264.1033, 264.1052, 264.1053, and 264.1058 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 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-320, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-320, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-320, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-320, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-320, filed 2/10/82.]

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

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

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

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

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

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

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

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

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

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

(iii) Communications or alarm systems;

(iv) Response to fires or explosions;

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

(vi) Shutdown of operations.

(2) Written training plan. The owner or operator must develop a written training plan which must be kept at the facility and which must include the following documents and records:

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

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

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

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

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

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

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

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

(i) Foundations;

(ii) Dikes;

(iii) Low-permeability soil liners;

(iv) Geomembranes (flexible membrane liners);

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

(vi) Final cover systems.

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

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

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

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

(3) Contents of program.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) Whenever dangerous waste is being poured, mixed, spread, or otherwise handled, all personnel involved must

have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required in subsection (1) of this section;

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

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

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

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

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

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

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

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

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

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

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

(3) The contingency plan must contain the following:

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

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

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

(d) A current list of names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator required under WAC 173-303-360(1). Where more than one person is listed, one must be named as primary emergency coordinator, and others must be listed in the order in which they will assume responsibility as alternates. For new facilities only, this list may be provided to the department at the time of facility certification (as required by WAC 173-303-810 (14)(a)(i)), rather than as part of the permit application;

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

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

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

(a) Maintained at the facility; and

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

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

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

(b) The plan fails in an emergency;

(c) The facility changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or

releases of dangerous waste or dangerous waste constituents, or in a way that changes the response necessary in an emergency;

(d) The list of emergency coordinators changes; or

(e) The list of emergency equipment changes.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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 with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, required by WAC 173-303-350(2), all operations and activities at the facility, the location and properties of all wastes handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

(2) Emergency procedures. The following procedures must be implemented in the event of an emergency.

(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(ii) Notify appropriate state or local agencies with designated response roles if their help is needed.

(b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials.

(c) Concurrently, the emergency coordinator must assess possible hazards to human health and the environment (considering direct, indirect, immediate, and long-term effects) that may result from the release, fire, or explosion.

(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment, he must report his findings as follows:

(i) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(ii) He must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their 24-hour toll free number (800) 424-8802).

(e) His assessment report must include:

(i) Name and telephone number of reporter;

(ii) Name and address of facility;

(iii) Time and type of incident (e.g., release, fire);

(iv) Name and quantity of material(s) involved, to the extent known;

(v) The extent of injuries, if any; and

(vi) The possible hazards to human health or the environment outside the facility.

(f) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other dangerous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

(g) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(h) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

(i) The emergency coordinator must ensure that, in the affected area(s) of the facility:

(i) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(j) The owner or operator must notify the department, and appropriate local authorities, that the facility is in compliance with (i) of this subsection before operations are resumed in the affected area(s) of the facility.

(k) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within fifteen days after the incident, he must submit a written report on the incident to the department. The report must include:

(i) Name, address, and telephone number of the owner or operator;

(ii) Name, address, and telephone number of the facility;

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

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

(v) The extent of injuries, if any;

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

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

(viii) Cause of incident; and

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(4) Manifest discrepancies.

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

(b) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator 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.

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

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

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

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

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

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

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

[Statutory Authority: Chapters 70.105 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 and trial tests required by WAC 173-303-300, General waste analysis, and by 40 CFR sections 264.1034, 264.1063, 265.1034, 265.1063, 268.4(a), and 268.7;

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

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

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

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

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

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

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

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

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

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

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

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

(2) Recordkeeping instructions. This paragraph provides instructions for recording the portions of the operating record which are related to describing the types, quantities, and management of dangerous wastes at the facility. This information must be kept in the operating record, as follows:

(a) Each dangerous waste received or managed must be described by its common name and by its dangerous waste number(s) from WAC 173-303-080 through 173-303-104. 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 then 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 gas);

(c) The weight, or volume and density, of the dangerous waste must be recorded, using one of the units of measure specified in Table 1, below;

TABLE 1

Unit of Measure	Symbol	Density
Pounds	P	
Short tons (2000 lbs)	T	
Gallons (U.S.)	G	P/G
Cubic yards	Y	T/Y
Kilograms	K	
Tonnes (1000 kg)	M	
Liters	L	K/L
Cubic meters	C	M/C

(d) And, the date(s) and method(s) of management for each dangerous waste received or managed (treated, recycled, stored, or disposed of) must be recorded, using the handling code(s) specified in Table 2, below.

TABLE 2

1. Storage
   - S01 Container (barrel, drum, etc.)
   - S02 Tank
   - S03 Waste pile
   - S04 Surface impoundment
   - S05 Other (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
T16 Cement kiln
T17 Lime kiln
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 lagoon or 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)

3. Disposal
D80 Underground injection
D81 Landfill
D82 Land treatment
D83 Ocean disposal
D84 Surface impoundment
(to be closed as a landfill)
D85 Other (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. 95-22-008 (Order 94-30), § 173-303-380, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-380, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-380, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-380, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-380, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-390 Facility reporting. The owner or operator of a facility is responsible for preparing and submitting the reports described in this section.

(1) Unmanifested waste reports. If a facility accepts any dangerous waste from an off-site source without an accompanying manifest or shipping paper, and if the waste is not excluded from the manifest requirements of this chapter 173-303 WAC, then the owner or operator must prepare and submit a single copy of a report to the department within fifteen days after receiving the waste. The report form and instructions in the Unmanifested Dangerous Waste Report - Form 6 (which may be obtained from the department) must be used for this report. The report must include at least the following information:

(a) The EPA/state identification number, name, and address of the facility;

(b) The date the facility received the waste;

(c) The EPA/state identification number, name, and address of the generator and the transporter, if available;

(d) A description and the quantity of each unmanifested dangerous waste the facility received;

(e) The method of management for each dangerous waste;

(f) The certification signed by the owner or operator of the facility or his authorized representative; and

(g) A brief explanation of why the waste was unmanifested, if known.

(2) Annual reports. The owner or operator of a facility that holds an active EPA/state identification number must prepare and submit a single copy of an annual report to the department by March 1 of each year. The report form and instructions in the Dangerous Waste Annual Report (which may be obtained from the department) must be used for this report. In addition, any facility which ships dangerous waste off-site must comply with the annual reporting requirements of WAC 173-303-220. The annual report must cover facility activities during the previous calendar year and must include, but is not limited to the following information:

(a) The EPA/state identification number, name, and address of the facility;

(b) The calendar year covered by the report;

(c) For off-site facilities, the EPA/state identification number of each dangerous waste generator from which the facility received a dangerous waste during the year. For imported shipments, the report must give the name and address of the foreign generator;

(d) A description and the quantity of each dangerous waste the facility received during the year. For off-site 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); and

(g) The certification signed in accordance with the requirements of WAC 173-303-810(12).

(3) Additional reports. The owner or operator must report to the department:

(a) Releases of dangerous wastes, fires, and explosions as specified in WAC 173-303-360 (2)(k), facility closures specified in WAC 173-303-610(6);

(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 173-303-691, 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.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-390, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-390, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-390, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-390, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-390, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-390, filed 2/10/82.]

WAC 173-303-395 Other general requirements. (1) Precautions for ignitable, reactive, or incompatible wastes.

(a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including, but not limited to, open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to specially designated locations. "No smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(b) Where specifically required by other sections of this chapter 173-303 WAC, the treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

(i) Generate extreme heat or pressure, fire or explosion, or violent reaction;

(ii) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;

(iii) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(iv) Damage the structural integrity of the facility or device containing the waste; or

(v) Through other like means, threaten human health or the environment.

(c) When required to comply with (a) and (b) of this subsection, the owner or operator must document that compliance in the operating record required under WAC 173-303-380(1). This documentation may be based on references to published scientific or engineering literature, data from trial tests, waste analyses, or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

(d) At least yearly, the owner or operator must inspect those areas of his facility where ignitable or reactive wastes are stored. This inspection must be performed in the presence of a professional person who is familiar with the Uniform Fire Code, or in the presence of the local, state, or federal fire marshal. The owner or operator must enter the following information in his inspection log or operating record as a result of this inspection:

(i) The date and time of the inspection;

(ii) The name of the professional inspector or fire marshal;

(iii) A notation of the observations made; and

(iv) Any remedial actions which were taken as a result of the inspection.

(2) Compliance with other environmental protection laws and regulations. In receiving, storing, handling, treating, processing, or disposing of dangerous wastes, the

owner/operator must design, maintain and operate his dangerous waste facility in compliance with all applicable federal, state and local laws and regulations (e.g., control of stormwater or sanitary water discharge, control of volatile air emissions, etc.).

(3) Asbestos dangerous waste disposal requirements. All asbestos containing waste material must be disposed of at waste disposal sites which are operated in accordance with 40 CFR Part 61 Subpart M. Such sites will not need to comply with any other standards of chapter 173-303 WAC, if they comply with 40 CFR Part 61.

(4) Loading and unloading areas. TSD facilities which receive or ship manifested shipments of liquid dangerous waste for treatment, storage or disposal must provide for and use an area (or areas) for loading and unloading waste shipments. The loading and unloading area(s) must be designed, constructed, operated and maintained to:

(a) Contain spills and leaks that might occur during loading or unloading;

(b) Prevent release of dangerous waste or dangerous waste constituents to ground or surface waters;

(c) Contain wash waters (if any) resulting from the cleaning of contaminated transport vehicles and load/unload equipment; and

(d) Allow for removal, as soon as possible, of collected wastes resulting from spills, leaks and equipment cleaning (if any) in a manner which assures compliance with (b) of this subsection.

(5) Storage time limit for impoundments and piles.

(a) Except as provided in (b) or (c) of this subsection, dangerous waste may not be stored in a surface impoundment or waste pile for more than five years after the waste was first placed in the impoundment or pile. For the purposes of this requirement, the five-year limit, for waste regulated under this chapter and being stored in impoundments or piles on the effective date of this requirement, will begin on August 1, 1984. The age of stored wastes must be determined on a monthly basis.

The owner/operator of a surface impoundment or waste pile used for storing dangerous waste must develop a written plan, to be kept at the facility, for complying with the five-year storage limit. The plan must describe the operating conditions, waste identification procedures (for keeping track of the age of the wastes), and a waste removal schedule, and at a minimum the plan must include the following elements:

(i) Methods for identifying the age of dangerous wastes placed in the impoundment or pile;

(ii) Where practical, procedures for segregating wastes of different ages. If the wastes cannot be practically segregated, then the age of all wastes placed in the impoundment or pile must be deemed the same age as the oldest waste in the impoundment or pile;

(iii) A schedule for removing dangerous waste from the impoundment or pile, or for disposing of them in a timely manner to assure compliance with the five-year limit;

(iv) A description of the actions to be taken according to the schedule required by (a)(iii) of this subsection;

(v) Procedures for noting in the operating record required by WAC 173-303-380(1) that the requirements of this subsection have been satisfied; and

(vi) Such other requirements as the department specifies.

(b) If the owner/operator of a surface impoundment or waste pile can develop a written plan and schedule for developing and implementing a recycling or treatment process for the wastes stored in his impoundment or pile, then the department may grant an extension to the storage time limit required in (a) of this subsection. Such extension will be granted only once, will only apply to those dangerous wastes covered by the recycling or treatment plan and which are less than five years old on the date that the plan is approved by the department, and will not exceed five years: *Provided,* That on a case-by-case basis the department may grant an extension of longer than five years, but in no case will any extension be granted for longer than ten years, if the owner/operator of the impoundment or pile can demonstrate to the department's satisfaction that an extension of more than five years will not pose a threat to public health or the environment, and is necessary because: Other treatment or recycling options of shorter durations are not available; the treatment or recycling plan developed by the owner/operator cannot be implemented within five years due to technological circumstances; or, such other reasons as are determined acceptable by the department. Until the department grants the extension by approving the recycling or treatment plan, the owner/operator must continue to comply with the requirements of (a) of this subsection. The recycling or treatment plan and schedule, at a minimum, must:

(i) Specify the wastes which will be recycled or treated in accordance with the plan;

(ii) Describe in detail the recycling or treatment which the owner/operator intends to perform. If the recycling or treatment will involve physical changes to the owner's/operator's facility, the plan must include descriptions of all necessary equipment, processes to be used, site plans, and maps to show any new structures, pipes, channels, waste handling areas, roads, etc.;

(iii) Discuss any permit actions (including issuance or modification) necessary under this chapter, and any other permits which will be required under other federal, state or local laws;

(iv) Establish a schedule for complying with the plan. The schedule must, at a minimum, cover:

(A) The rate at which wastes will be recycled or treated in order to comply with the extension granted by the department;

(B) Construction and equipment installation times as appropriate;

(C) Timing for complying with all required permit actions; and

(D) Such other elements as the department might require;

(v) Describe how the owner/operator will continue to comply with the requirements of (a) of this subsection for all wastes not specified in (b)(i) of this subsection;

(vi) Identify any future occurrences or situations which the owner/operator could reasonably expect to occur and which might cause him to fail to comply with his recycling or treatment plan. The owner/operator must also describe what actions he would take in the event that such occurrences or situations happen;

(vii) Be approved by the department. The plan may not be implemented until it is approved by the department including, if necessary, issuance or modification of a facility

permit as required by this chapter. Any extension granted by the department will begin on the date that the plan is approved, or the date five years after the effective date of this subsection, whichever is later; and

(viii) Include any other elements that the department might require.

(c) The owner/operator of a surface impoundment or waste pile is exempted from the requirements of (a) and (b) of this subsection if:

(i) The owner/operator of a surface impoundment or waste pile can demonstrate to the department's satisfaction that the impoundment or pile is not used primarily for storage, but that it is primarily used to actively and effectively neutralize, detoxify, or other wise treat dangerous waste; or

(ii) The owner/operator of a surface impoundment or waste pile can demonstrate to the department's satisfaction that dangerous waste is removed on a frequent basis (at least four times a year) for treatment, recycling or disposal, provided that the amount of waste removed during any five-year period must equal or exceed the amount of waste placed in the impoundment or pile during that five-year period. However, this exemption does not apply to waste removal which is being performed pursuant to a recycling or treatment plan developed and approved under (b) of this subsection; or

(iii) The owner/operator of a surface impoundment or waste pile has demonstrated, through his permit, closure plan or other instrument, that the impoundment or pile is being operated as a land disposal unit and that it will be closed as a landfill.

(6) Labeling for containers and tanks. The owner or operator must label containers and tanks in a manner which adequately identifies the major risk(s) associated with the contents for employees, emergency response personnel and the public (Note—If there is already a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate). The owner or operator must ensure that labels are not obscured, removed, or otherwise unreadable in the course of inspection required under WAC 173-303-320. For tanks, the label or sign must be legible at a distance of at least fifty feet. For containers, the owner or operator must affix labels upon transfer of dangerous waste from one container to another. The owner or operator must destroy or otherwise remove labels from the emptied container, unless the container will continue to be used for storing dangerous waste at the facility.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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) The interim status standards apply to owners and operators of facilities which treat, store, transfer, and/or dispose of dangerous waste. For purposes of this section, interim status applies to all facilities which comply fully with the requirements for interim status under Section 3005(e) of the Federal Resource Conservation and Recovery Act or WAC 173-303-805. The interim status standards also apply to those owners and operators of facilities in existence on November 19, 1980, for RCRA wastes and those facilities in existence on August 9, 1982, for state only wastes who have failed to provide the required notification pursuant to WAC 173-303-060 or failed to file Part A of the permit application pursuant to WAC 173-303-805 (4) and (5). Interim status will end after final administrative disposition of the Part B permit application is completed, or may be terminated for the causes described in WAC 173-303-805(8).

(b) Interim status facilities must meet the interim status standards by November 19, 1980, except that:

(i) Interim status facilities which handle only state designated wastes (i.e., not designated by 40 CFR Part 261) must meet the interim status standards by August 9, 1982; and

(ii) Interim status facilities must comply with the additional state interim status requirements specified in subsection (3)(c)(ii), (iii) and (v), of this section, by August 9, 1982.

(c) The requirements of the interim status standards do not apply to:

(i) Persons disposing of dangerous waste subject to a permit issued under the Marine Protection, Research and Sanctuaries Act;

(ii) Reserved;

(iii) The owner or operator of a POTW who treats, stores, or disposes of dangerous wastes, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(4);

(iv) The owner or operator of a totally enclosed treatment facility or elementary neutralization or wastewater treatment units as defined in WAC 173-303-040, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(5);

(v) Generators accumulating waste for less than ninety days except to the extent WAC 173-303-200 provides otherwise;

(vi) The addition, by a generator, of absorbent material to waste in a container, or of waste to absorbent material in a container, provided that these actions occur at the time the waste is first placed in containers or, in the case of repackaging of previously containerized waste into new containers, at the time the waste is first placed into the new containers and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(vii) The compaction or sorting, by a generator, of miscellaneous waste forms such as cans, rags, and bottles in a container, so long as the activity is solely for the purpose of reducing waste void space, and so long as these activities are conducted in a manner that protects human health and prevents any release to the environment and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(viii) Generators treating dangerous waste on-site in tanks or containers 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.

Reserve.

(3) Standards.

(a) Interim status standards are the standards set forth by the Environmental Protection Agency in 40 CFR Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, and DD 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; and the corrective action requirements of WAC 173-303-646(2);

(ii) WAC 173-303-630(3), for containers. In addition, for container storage, the department may require that the storage area include secondary containment in accordance with WAC 173-303-630(7), if the department determines that there is a potential threat to public health or the environment due to the nature of the wastes being stored, or due to a history of spills or releases from stored containers. Any new container storage areas constructed or installed after September 30, 1986, must comply with the provisions of WAC 173-303-630(7).

(iii) WAC 173-303-640 (5)(d), for tanks; and

(iv) WAC 173-303-805.

(b) For purposes of applying the interim status standards of 40 CFR Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, and DD 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";

(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, and DD:

(i) The words "the effective date of these regulations" means:

(A) November 19, 1980, for facilities which manage any wastes designated by 40 CFR Part 261;

(B) For wastes which become designated by 40 CFR Part 261 subsequent to November 19, 1980, the effective date is the date on which the wastes become regulated;

(C) March 12, 1982, for facilities which manage wastes designated only by WAC 173-303-080 through 173-303-100 and not designated by 40 CFR Part 261;

(D) For wastes which become designated only by WAC 173-303-080 through 173-303-100 and not designated by 40 CFR Part 261 subsequent to March 12, 1982, the effective date is the date on which the wastes become regulated.

(ii) "Subpart N - landfills" has an additional section added which reads: "An owner/operator must not landfill an organic carcinogen or an EHW, as defined by WAC 173-303-080 through 173-303-100, except at the EHW facility at Hanford";

(iii) "Subpart R - underground injection" has an additional section which reads: "Owners and operators of wells are prohibited from disposing of EHW or an organic carcinogen designated under WAC 173-303-080 through 173-303-100";

(iv) "Subpart M - land treatment," section 265.273(b) is modified to replace the words "Part 261, Subpart D of this chapter" with "WAC 173-303-080";

(v) "Subpart F - ground water monitoring," section 265.91(c) includes the requirement that: "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";

(vi) "Subpart H - financial requirements" has an additional section which reads: "Any owner or operator who can provide financial assurances and instruments which satisfy the requirements of WAC 173-303-620 will be deemed to be in compliance with 40 CFR Part 265 Subpart H". In 40 CFR Parts 265.143(g) and 265.145(g) the following sentence does not apply to the state: "If the facilities covered by the mechanisms are in more than one Region, identical evidence of financial assurance must be submitted to, and maintained with the Regional Administrators of all such Regions." In addition, the following sections and any cross-reference to these sections are not incorporated by reference: 40 CFR Parts 265.149 and 265.150; and

(vii) "Subpart J - tank systems" section 265.193(a) is modified so that the dates by which secondary containment (which meets the requirements of that section) must be provided are the same as the dates in WAC 173-303-640 (4)(a).

(viii) "Subpart J - tank systems" section 265.191(a) is modified so that the date by which an assessment of a tank system's integrity must be completed is January 12, 1990.

(ix) "Subpart G - closure and post-closure" section 265.115 is modified to read "Within 60 days of completion of closure of each dangerous waste management unit (including tank systems and container storage areas) and within 60 days of completion of final closure..." In addition,

the clean-up levels for removal or decontamination set forth at WAC 173-303-610 (2)(b) apply.

(x) "Subpart B - general facility standards. References to "EPA" (etc.), means the "department" except at 40 CFR 265.11. Additionally, references to "administrator" (etc.), means the "director" except at 40 CFR 265.12(a)."

(xi) The following sections and any cross-reference to these sections are not incorporated or adopted by reference:

(A) 40 CFR Parts 260.1 (b)(4)-(6) and 260.20-22.

(B) 40 CFR Parts 264.1 (d) and (f); 265.1 (c)(4); 264.149-150 and 265.149-150; 264.301(k); and 265.430.

(C) 40 CFR Parts 268.5 and 6; 268 Subpart B; 268.42(b); and 268.44.

(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.

(4) The requirements of this section apply to owners or operators of all facilities that treat, store or dispose of hazardous waste referred to in 40 CFR Part 268, and the 40 CFR Part 268 standards are considered material conditions or requirements of the interim status standards incorporated by reference in subsection (3) of this section.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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 173-303-500 Recycling requirements for state-only dangerous waste. (1) Applicability. This section applies to the recycling of state-only dangerous waste that are not regulated as hazardous wastes (defined in WAC 173-303-040) by EPA.

(2) Standards.

(a) If state-only dangerous wastes are recycled in any of the ways described in WAC 173-303-505 through 173-303-525, then such recycling is subject to the respective requirements of WAC 173-303-505 through 173-303-525, except as provided in (c) of this subsection.

(b) If state-only dangerous wastes are recycled in any way not specifically described in WAC 173-303-505 through 173-303-525, then such recycling is subject to the requirements of WAC 173-303-120(4), except as provided in (c) of this subsection.

(c) Recyclers who receive state-only dangerous wastes from off-site and who store the wastes in containers or tanks may, in lieu of the provisions for storing dangerous wastes prior to recycling, comply with:

(i) WAC 173-303-060;

(ii) WAC 173-303-370 (if the dangerous waste received must be accompanied by a manifest); and

(iii) The following requirements, provided that the dangerous waste is recycled within ninety days of the date it is received by the recycler:

(A) WAC 173-303-330 through 173-303-360;

(B) WAC 173-303-630 (2), (3), (4), (5), (6), (8) and (9), for containers;

(C) WAC 173-303-640 (3), (4), (5), (6) and (7), for tanks; and

(D) WAC 173-303-630(7) for new container areas installed after September 30, 1986, and WAC 173-303-640(2) for new tanks installed after September 30, 1986.

(d) The department may require a recycler who is storing his waste under the provisions of (c) of this subsection to comply with the provisions for storing dangerous waste prior to recycling specified in WAC 173-303-505 through 173-303-525 and 173-303-120(4) if:

(i) The recycler fails to comply with the requirements of (c) of this subsection; or

(ii) The department determines, on a case-by-case basis, that the requirements of (c) of this subsection do not adequately protect public health or the environment.

(3) Relief from standards. The owner/operator of a facility recycling dangerous wastes under the provisions of this section may ask the department to provide relief from any of the applicable requirements of this section. Requests for relief must be submitted as described in (a) of this subsection. Requests for relief will be approved or denied as described in (b) of this subsection.

(a) A request for relief must be submitted by the recycler to the department in writing and must describe the standards from which the recycler is seeking relief. The request must include:

(i) The facility name, EPA/state identification number, address, telephone number, and a contact person at the facility;

(ii) The waste(s) managed at the facility and the type(s) recycling;

(iii) The specific standards from which the owner/operator seeks relief;

(iv) A description, for each standard, demonstrating:

(A) Why the owner/operator believes the standard to be unnecessary;

(B) How public health and the environment will continue to be protected if the standard is not applied to the facility; and

(C) Any evidence supporting the contention that public health and the environment will be adequately protected if the standard is not applied (e.g., test data, diagrams, experiences at similar facilities, records, reports, etc.); and

(v) The following certification, signed and dated by a person who would be authorized to sign a report under WAC 173-303-810 (12)(b):

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this request and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The department may ask for any additional information it deems necessary, and will not consider approval of the owner's/operator's request until all necessary information has been submitted. Failure to provide any of the information required may result in the department's denying the owner's/operator's request.

(b) The department will review any requests submitted pursuant to (a) of this subsection, and based on the adequacy of the information provided in the request will approve or deny all or any part of the request. The department will notify the recycler of its decision in writing. If the department decides to approve all or part of the request and the recycler agrees with the department's decision, then the department will proceed to grant the approval as described below. No approval will be effective until the procedures described below have been completed.

(i) For facilities which are required to have a final facility permit, the department will follow the procedures for issuing (or, for facilities which already have a final facility permit, the procedures for modifying) a final facility permit, as described in WAC 173-303-806. The new or modified final facility permit will include the standards the owner/operator must meet.

(ii) For all other types of recycling facilities, the department will issue a notice of modification stating what standards will be applied. Before issuing the notice of modification, the department will provide public notice of its intent, will allow thirty days for public comment, and will hold a public hearing if there is a significant degree of public interest or there is written notice of opposition and the department receives a request for a hearing during the comment period. Notice of a public hearing will be provided at least fifteen days in advance, and the public comment period will be extended to include the date of the hearing if it will occur after the initial thirty-day comment period. Within fifteen days of the end of the public comment period the department will, based on comments received, issue, modify and issue, or deny the notice of modification.

(c) Failure to comply with the conditions and standards as stated in the permit or notice of modification issued under (b) of this subsection will form a basis for modifying or revoking the permit or notice of modification.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-500, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-500, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-500, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-500, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-500, filed 2/10/82.]

WAC 173-303-505 Special requirements for recyclable materials used in a manner constituting disposal. (1) Applicability.

(a) This section applies to recyclable materials that are applied to or placed on the land:

(i) Without mixing with any other substance(s); or

(ii) After mixing or combining with any other substance(s). These materials will be referred to as "materials used in a manner that constitutes disposal."

(b) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if the recyclable materials have undergone a chemical reaction in the course of producing the product so as to become inseparable by physical means and if such products meet the applicable treatment standards in 40 CFR Part 268 Subpart D (or applicable prohibition levels in 268.32 or RCRA section 3004(d), where no treatment standards have been established) for each recyclable material (i.e., hazardous waste) that they contain. Registered commercial fertilizers that are produced for the general public's use that contain recyclable materials also are not subject to regulation provided they meet these same treatment standards or prohibition levels for each recyclable material that they contain. However, zinc-containing fertilizers using hazardous waste K061 that are produced for the general public's use are not presently subject to regulation.

(2) Recyclable materials used in a manner that constitutes disposal are dangerous wastes and are subject to the following requirements:

(a) For generators, WAC 173-303-170 through 173-303-230;

(b) For transporters, WAC 173-303-240 through 173-303-270; and

(c) For facilities that store or use dangerous wastes in a manner constituting disposal, the applicable requirements of 40 CFR Part 268 (incorporated by reference in WAC 173-303-140 (2)(a) and 173-303-280 through 173-303-840 (except that users of such products are not subject to these standards if the products meet the requirements of subsection (1)(b) of this section).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-505, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-505, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-505, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-505, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-505, filed 4/18/84.]

WAC 173-303-506 Special requirements for the recycling of spent CFC or HCFC refrigerants. (1) Applicability.

(a) This section applies to spent chlorofluorocarbon (CFC) and hydrochlorofluorocarbon (HCFC) refrigerants that are reclaimed or recycled. Refrigerants eligible for these special requirements are those CFCs and HCFCs that were used as heat transfer material in a refrigeration cycle in totally enclosed heat transfer equipment and are subsequently reclaimed or recycled.

(b) Persons who generate, transport, or store spent CFC or HCFC refrigerants prior to reclamation or recycling and facilities that reclaim or recycle spent CFC or HCFC refrigerants are subject to the requirements of this section, and WAC 173-303-050, 173-303-145, and 173-303-960. Spent CFC or HCFC refrigerants that are not reclaimed or recycled are subject to all the applicable requirements of chapter 173-303 WAC. Any discharge of spent CFCs or HCFCs to the environment constitutes disposal and is subject to full regulation under chapter 173-303 WAC.

(2) Generator requirements.

(a) Persons who reclaim or recycle their spent CFC or HCFC refrigerants, either on-site or send their wastes off-site to be reclaimed or recycled, must keep records for a period

of at least five years from the date of reclamation/recycling to document:

(i) The date of shipment (if sent off-site);

(ii) The quantity (by weight) reclaimed/recycled per shipment (when sent off-site) or batch (when recycled on-site);

(iii) The percentage of the total amount of CFC or HCFC wastes reclaimed/recycled per shipment or batch (and the manner of disposal for the remaining CFCs or HCFCs); and

(iv) The dates of reclamation/recycling.

(b) For CFCs or HCFCs sent off-site, the generator must obtain a signed document from the reclamation facility certifying the information in (a) of this subsection.

(3) Reclamation facility requirements.

(a) Facilities that reclaim or recycle CFC or HCFC refrigerants must comply with all the requirements of WAC 173-303-500 (except for WAC 173-303-500 (2)(c)(ii)). The applicable provisions of the following sections will also apply:

(i) WAC 173-303-280(2), General requirements for dangerous waste management facilities, imminent hazard;

(ii) WAC 173-303-283, Performance standards;

(iii) WAC 173-303-290 (1) and (2), Required notices;

(iv) WAC 173-303-380, Facility recordkeeping; except for WAC 173-303-380 (1)(c), (e), and (h);

(v) WAC 173-303-390(3), Facility reporting;

(vi) WAC 173-303-630(10), Use and management of containers;

(vii) WAC 173-303-640 (1), (2), (8), and (10), Tank systems, except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a) (i.e., a recycler, unless otherwise required to do so, does not have to prepare a closure plan, a cost estimate for closure, or provide financial responsibility for his tank system to satisfy the requirements of this section).

(b) The reclamation facility must supply generators with a signed document certifying the information in subsection (2)(a) of this section.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-506, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 93-02-050 (Order 92-32), § 173-303-506, filed 1/5/93, effective 2/5/93.]

WAC 173-303-510 Special requirements for dangerous wastes burned for energy recovery. (1) Applicability.

(a) This section applies to generators, marketers, transporters, blenders, and burners of dangerous waste fuels that are to be burned for energy recovery in any boiler or industrial furnace that is not regulated under Subpart O of 40 CFR Part 265 or WAC 173-303-670, except as provided by (b) of this subsection. These regulations do not apply to gas recovered from dangerous waste management activities when such gas is burned for energy recovery. Note: (This note is a reminder that all generators, transporters, and burners of federally regulated hazardous waste fuels that are to be burned for energy recovery, and all storage facility owners and operators of facilities that store dangerous waste that is burned in a boiler or industrial furnace must comply with the requirements of 40 CFR Part 266 Subpart H.)

(b) The following dangerous wastes are not subject to regulation under this section:

(i) Used oil burned for energy recovery if it is a dangerous waste because it:

(A) Exhibits a characteristic of dangerous waste identified in WAC 173-303-090; or

(B) Is designated as DW only through the criteria of WAC 173-303-100; or

(C) Is a dangerous waste designated solely as W001.

Such used oil is subject to regulation under WAC 173-303-515 rather than this section.

Note: Used oil burned for energy recovery containing a listed waste (unless such listed waste is only state source W001) or a waste designated as EHW through the criteria of WAC 173-303-100 (a) and (b) is subject to this section.

(ii) (Reserved.)

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

(a) "Dangerous waste fuel" means dangerous waste burned or to be burned for energy recovery. Fuel produced from dangerous waste by processing, blending, or other treatment is also dangerous waste fuel.

(b) "Distributor" means persons who distribute but do not process or blend dangerous waste fuel. Distributors may broker fuel by arranging for the final disposition of the fuel. Distributors are regulated under subsection (6) of this section.

(c) "Blender" means persons who produce, process, or blend fuel from dangerous wastes. Blenders are regulated under subsection (7) of this section.

(d) "Marketer" means persons who are:

(i) Generators who market dangerous waste fuel directly to a burner. Generators are regulated under subsection (4) of this section;

(ii) Distributors, regulated under subsection (6) of this section;

(iii) Blenders, regulated under subsection (7) of this section.

(3) Prohibitions.

(a) A person may market dangerous waste fuel only:

(i) To persons, in state, who have notified the department of their dangerous waste fuel activities under WAC 173-303-060 and have an EPA/state identification number or to out-of-state marketers or burners who have notified the EPA or authorized state agency and who have an EPA/state identification number; and

(ii) When marketed to a burner, to persons who burn the fuel in boilers or industrial furnaces identified in (b) of this subsection.

(b) Dangerous waste fuel may be burned for energy recovery in the following devices only;

(i) Industrial furnaces identified in WAC 173-303-040;

(ii) Boilers, as defined in WAC 173-303-040, that are identified as follows:

(A) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or

(B) Utility boilers used to produce electric power, steam, or heated or cooled air or other gases or fluids for sale.

(c) No fuel which contains any dangerous waste may be burned in any cement kiln which is located within the boundaries of any incorporated municipality with a population greater than five hundred thousand (based on the most recent census statistics) unless such kiln fully complies with regulations under this chapter that are applicable to incinerators.

(4) Standards applicable to generators of dangerous waste fuel.

(a) All generators of dangerous waste that is used as a fuel or used to produce a fuel are subject to WAC 173-303-170 through 173-303-230.

(b) Generators who are marketers. Generators are marketers if they send their waste fuel directly to a burner. Generators who are marketers must:

(i) Prohibitions. Comply with the prohibitions under subsection (3) of this subsection.

(ii) Notification. Comply with the notification requirements under WAC 173-303-060 for dangerous waste fuel activities. Generators who have previously notified the department of their dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify their dangerous waste fuel activities.

(iii) Accumulation. Comply with accumulation requirements of WAC 173-303-200 or 173-303-201.

(iv) Storage. For generators who have interim or final status and exceed the accumulation time frames referenced in (b)(iii) of this subsection, comply with the storage provisions of:

(A) WAC 173-303-280 through 173-303-395; and

(B) WAC 173-303-800 through 173-303-840; and

(C) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-691 for final status facilities.

(v) Required notice. Obtain, prior to initiating the first shipment of dangerous waste fuel, a one time written and signed certification notice from the burner certifying that:

(A) The burner has notified as described under subsection (3) of this subsection; and

(B) The burner will burn the dangerous waste fuel only in an industrial furnace or boiler identified in subsection (3)(b) of this subsection.

(vi) Recordkeeping. Keep a copy of each certification notice received for at least five years from the date of the last dangerous waste fuel shipment to the burner who sent such notice.

(c) Generators who are burners also are subject to subsection (8) of this section.

(5) Standards applicable to transporters of dangerous waste fuel. Transporters of dangerous waste fuel (and dangerous waste that is used to produce a fuel) are subject to the requirements of WAC 173-303-240 through 173-303-270.

(6) Standards applicable to distributors of dangerous waste fuel.

(a) Prohibitions. The prohibitions under subsection (3) of this section;

(b) Notification. Notification requirements under WAC 173-303-060 for dangerous waste fuel activities. Distributors who have previously notified the department of their dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify their dangerous waste fuel activities.

(c) Storage. Distributors who store dangerous waste fuels must comply with the applicable storage provisions of:

(i) WAC 173-303-280 through 173-303-395; and

(ii) WAC 173-303-800 through 173-303-840; and

(iii) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-691 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 173-303-691 for final status facilities;

(d) Off-site shipment. The standards for generators in WAC 173-303-170 through 173-303-230 when a blender initiates a shipment of dangerous waste fuel, except that a blender may not accumulate dangerous waste fuels under the accumulation provisions of WAC 173-303-200 or 173-303-201;

(e) Required notices.

(i) Before initiating the first shipment of dangerous waste fuel to another blender, a distributor, or a burner, a blender must obtain a one-time written and signed certification notice from the blender, distributor, or burner certifying that:

(A) The burner, distributor, or blender has notified as described under subsection (3) of this section; and

(B) If the recipient is a burner, the burner will burn the dangerous waste fuel only in an industrial furnace or boiler identified in subsection (3)(b) of this section.

(ii) Before accepting the first shipment of dangerous waste fuel from another blender or distributor, the blender must provide the other blender or distributor with a one-time written and signed certification that the blender has complied with the notification requirements described in subsection (3) of this section; and

(f) Recordkeeping. A blender must keep a copy of each certification notice received or sent for at least five years from the date the blender last engaged in a dangerous waste fuel marketing transaction with the person who sent or received the certification notice.

(8) Standards applicable to burners of dangerous waste fuel.

Owners and operators of industrial furnaces and boilers identified in subsection (3)(b) of this section must comply with:

(a) Prohibitions. The prohibitions under subsection (3) of this section;

(b) Notification. Notification requirements under WAC 173-303-060 for dangerous waste fuel activities. A burner who has previously notified the department of dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify the dangerous waste fuel activities;

(c) Storage.

(i) For short term accumulation by generators who burn their dangerous waste fuel on-site, the applicable provisions of WAC 173-303-200 or 173-303-201.

(ii) For all burners who store dangerous waste fuel, the applicable storage provisions of:

(A) WAC 173-303-280 through 173-303-395;

(B) WAC 173-303-800 through 173-303-840; and

(C) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-691 for final status facilities (the air emission requirements do not apply to burners that meet the small quantity burner exemption at 40 CFR 266.101);

(d) Required notices. Before a burner accepts the first shipment of dangerous waste fuel from a distributor, or a blender, or a generator the burner must provide the distributor, or the blender, or the generator a one-time written and signed notice certifying that:

(i) The burner has notified as described under subsection (3) of this section; and

(ii) The dangerous waste fuel will only be burned in an industrial furnace or boiler identified in subsection (3)(b) of this section.

(e) Recordkeeping. In addition to the applicable recordkeeping requirements of WAC 173-303-380, a burner must keep a copy of each certification notice sent for at least five years from the date the burner last receives dangerous waste fuel from the person who received the certification notice.

(f) Local requirements. Any person who burns dangerous waste for energy recovery must comply with air emission requirements of the local air pollution control authority (or department of ecology if no local authority with jurisdiction exists).

[Statutory Authority: Chapters 70.105 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 173-303-550 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 173-303-600 Final facility standards. Purpose, scope, and applicability.

(1) The purpose of WAC 173-303-600 through 173-303-680, is to establish minimum state-wide standards which describe the acceptable management of dangerous waste. In addition to WAC 173-303-600 through 173-303-680, the final facility standards include WAC 173-303-280 through 173-303-395.

(2) The final facility standards apply to owners and operators of all facilities which treat, store or dispose of dangerous waste, and which are not exempted by subsection (3) of this section.

(3) The final facility standards do not apply to:

(a) Persons whose disposal activities are permitted under the Marine Protection, Research and Sanctuaries Act, except that storage, or treatment facilities where dangerous waste is loaded onto an ocean vessel for incineration or disposal at sea are subject to final facility standards;

(b) Persons whose disposal activities are permitted under the underground injection control program of the Safe Drinking Water Act, except that storage, or treatment facilities needed to handle dangerous wastes are subject to final facility standards;

(c) The owner or operator of a POTW which treats, stores, or disposes of dangerous waste provided he has a permit by rule pursuant to the requirements of WAC 173-303-802(4);

(d) A generator accumulating waste on site in compliance with WAC 173-303-200;

(e) The owner or operator of a facility which is permitted to manage solid waste pursuant to chapter 173-304 WAC, if the only dangerous waste the facility manages is excluded from regulation under this chapter by WAC 173-303-070(8);

(f) A farmer disposing of waste pesticides from his own use provided he complies with WAC 173-303-160 (2)(b);

(g) A transporter storing a manifested shipment of dangerous waste for ten days or less in accordance with WAC 173-303-240(5);

(h) Any person, other than an owner or operator who is already subject to the final facility standards, who is carrying out an immediate or emergency response to contain or treat a discharge or potential discharge of a dangerous waste or hazardous substance;

(i) The owner or operator of a facility which is in compliance with the interim status requirements of WAC 173-303-400 and 173-303-805, until final administrative disposition of his final facility permit;

(j) The owner or operator of a totally enclosed treatment facility or elementary neutralization or wastewater treatment unit as defined in WAC 173-303-040, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(5);

(k) The addition, by a generator, of absorbent material to waste in a container, or of waste to absorbent material in a container, provided that these actions occur at the time the waste is first placed in containers or, in the case of repackaging of previously containerized waste into new containers, at the time the waste is first placed into the new containers and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(l) The compaction or sorting of miscellaneous waste forms such as cans, rags, and bottles in a container, so long as the activity is solely for the purpose of reducing waste void space, and so long as these activities are conducted in a manner that protects human health and prevents any release to the environment and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(m) Generators treating dangerous waste on-site in tanks or containers that are used for accumulation of such wastes provided the generator complies with the WAC 173-303-170(3); and

(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).

(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.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-600, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-600, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-600, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-600, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-600, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-600, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-600, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-600, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-600, filed 2/10/82.]

WAC 173-303-610 Closure and postclosure. (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 postclosure care), apply to the owners and operators of all regulated units (as defined in WAC 173-303-040) at which dangerous waste will remain after closure, to tank systems that are required under WAC 173-303-640(8) to meet the requirements of landfills, to surface impoundments, waste piles, and miscellaneous units as specified in WAC 173-303-650(6), 173-303-660(9), and 173-303-680(4), respectively; to containment buildings that are required under 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695) to meet the requirements for landfills; and, unless otherwise authorized by the department, to the owners and operators of all facilities which, at closure, cannot meet the removal or decontamination limits specified in subsection (2)(b) of this section.

(c) For the purposes of the closure and postclosure requirements, any portion of a facility which closes is subject to the applicable closure and postclosure standards even if the rest of the facility does not close and continues to operate.

(2) Closure performance standard. The owner or operator must close the facility in a manner that:

(a)(i) Minimizes the need for further maintenance;

(ii) Controls, minimizes or eliminates to the extent necessary to protect human health and the environment, postclosure escape of dangerous waste, dangerous constituents, leachate, contaminated run-off, or dangerous waste decomposition products to the ground, surface water, ground water, or the atmosphere; and

(iii) Returns the land to the appearance and use of surrounding land areas to the degree possible given the nature of the previous dangerous waste activity.

(b) Where the closure requirements of this section, or of WAC 173-303-630(10), 173-303-640(8), 173-303-650(6),

173-303-655(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680 (2) through (4), or 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695) call for the removal or decontamination of dangerous wastes, waste residues, or equipment, bases, liners, soils or other materials containing or contaminated with dangerous wastes or waste residue, then such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed:

(i) For soils, ground water, surface water, and air, the numeric cleanup levels calculated using residential exposure assumptions according to the Model Toxics Control Act Regulations, chapter 173-340 WAC as now or hereafter amended. Primarily, these will be numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate, see WAC 173-340-700 through 173-340-760, excluding WAC 173-340-745; and

(ii) For all structures, equipment, bases, liners, etc., clean closure standards will be set by the department on a case-by-case basis in accordance with the closure performance standards of WAC 173-303-610 (2)(a)(ii) and in a manner that minimizes or eliminates post-closure escape of dangerous waste constituents.

(3) Closure plan; amendment of plan.

(a) The owner or operator of a dangerous waste management facility must have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the dangerous waste at partial or final closure are required by WAC 173-303-650(6) and 173-303-660(9) to have contingent closure plans. The plan must be submitted with the permit application, in accordance with WAC 173-303-806(4), and approved by the department as part of the permit issuance procedures under WAC 173-303-840. The approved closure plan will become a condition of any permit. The department's decision must assure that the approved closure plan is consistent with subsections (2), (3), (4), (5), and (6) of this section, and the applicable requirements of WAC 173-303-630(10), 173-303-640(8), 173-303-645, 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680(2), and 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695). A copy of the approved plan and all revisions to the plan must be furnished to the department upon request, including request by mail until final closure is completed and certified in accordance with subsection (6) of this section. The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include at least:

(i) A description of how each dangerous waste management unit at the facility will be closed in accordance with subsection (2) of this section;

(ii) A description of how final closure of the facility will be conducted in accordance with subsection (2) of this section. The description must identify the maximum extent of the operation which will be unclosed during the active life of the facility;

(iii) An estimate of the maximum inventory of dangerous wastes ever on-site over the active life of the facility. (Any change in this estimate is a minor modification under WAC 173-303-830(4));

(iv) A detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all dangerous wastes, and identification of the type(s) of the off-site dangerous waste management units to be used, if applicable;

(v) A detailed description of the steps needed to remove or decontaminate all dangerous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard;

(vi) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground water monitoring, leachate collection, and run-on and run-off control; and

(vii) A schedule for closure of each dangerous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each dangerous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all dangerous waste inventory and of the time required to place a final cover must be included.) Additionally, for facilities that use trust funds to establish financial assurance under WAC 173-303-620 (4) or (6) and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

(b) The owner or operator must submit a written 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.

(iii) The owner or operator must submit a written request for a permit modification including a copy of the amended closure plan for approval at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the closure plan. If an unexpected event

occurs during the partial or final closure period, the owner or operator must request a permit modification no later than thirty days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all dangerous waste at closure and is not otherwise required to prepare a contingent closure plan under WAC 173-303-650(6) or 173-303-660(9), must submit an amended closure plan to the department no later than sixty days from the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the requirements of WAC 173-303-665, or no later than thirty days from that date if the determination is made during partial or final closure. The department will approve, disapprove, or modify this amended plan in accordance with the procedures in WAC 173-303-800 through 173-303-840. The approved closure plan will become a condition of any permit issued.

(iv) The department may request modifications to the plan under the conditions described in (b)(ii) of this subsection. The owner or operator must submit the modified plan within sixty days of the department's request, or within thirty days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the department will be approved in accordance with the procedures in WAC 173-303-800 through 173-303-840.

(c) Notification of partial closure and final closure.

(i) The owner or operator must notify the department in writing at least sixty days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment, or landfill unit, or final closure of a facility with such a unit. The owner or operator must notify the department in writing at least forty-five days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed.

(ii) The date when he "expects to begin closure" must be either:

(A) No later than thirty days after the date on which any dangerous waste management unit receives the known final volume of dangerous wastes or, if there is a reasonable possibility that the dangerous waste management unit will receive additional dangerous wastes, no later than one year after the date on which the unit received the most recent volume of dangerous waste. If the owner or operator of a dangerous waste management unit can demonstrate to the department that the dangerous waste management unit or facility has the capacity to receive additional dangerous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the department may approve an extension to this one-year limit; or

(B) For units meeting the requirements of subsection (4)(d) of this section, no later than thirty days after the date on which the dangerous waste management unit receives the known final volume of nondangerous wastes, or if there is a reasonable possibility that the dangerous waste management unit will receive additional nondangerous wastes, no later than one year after the date on which the unit received the most recent volume of nondangerous wastes. If the owner or operator can demonstrate to the department that the dangerous waste management unit has the capacity to receive additional nondangerous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the department may approve an extension to this one-year limit.

(iii) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order to cease receiving dangerous wastes or to close, then the requirements of (c) of this subsection do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in subsection (4) of this section.

(iv) Removal of wastes and decontamination or dismantling of equipment. Nothing in this subsection will preclude the owner or operator from removing dangerous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

(4) Closure; time allowed for closure.

(a) Within ninety days after receiving the final volume of dangerous wastes, or the final volume of nondangerous wastes if the owner or operator complies with all applicable requirements in (d) and (e) of this subsection, at a dangerous waste management unit or facility, the owner or operator must treat, remove from the unit or facility, or dispose of on site, all dangerous wastes in accordance with the approved closure plan. The department may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that he has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, and either:

(i) The activities required to comply with this paragraph will, of necessity, take longer than ninety days to complete; or

(ii)(A) The dangerous waste management unit or facility has the capacity to receive additional dangerous wastes, or has the capacity to receive nondangerous wastes if the owner or operator complies with (d) and (e) of this subsection;

(B) There is a reasonable likelihood that he or another person will recommence operation of the dangerous waste management unit or the facility within one year; and

(C) Closure of the dangerous waste management unit or facility would be incompatible with continued operation of the site.

(b) The owner or operator must complete partial and final closure activities in accordance with the approved closure plan and within one hundred eighty days after receiving the final volume of dangerous wastes, or the final volume of nondangerous wastes if the owner or operator complies with all applicable requirements in (d) and (e) of this subsection, at the dangerous waste management unit or facility. The department may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that he has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating dangerous waste management unit or facility, including compliance with all applicable permit requirements, and either:

(i) The partial or final closure activities will, of necessity, take longer than one hundred eighty days to complete; or

(ii)(A) The dangerous waste management unit or facility has the capacity to receive additional dangerous wastes, or has the capacity to receive nondangerous wastes if the owner or operator complies with (d) and (e) of this subsection;

(B) There is reasonable likelihood that he or another person will recommence operation of the dangerous waste management unit or the facility within one year; and

(C) Closure of the dangerous waste management unit or facility would be incompatible with continued operation of the site.

(c) The demonstrations referred to in (a) and (b) of this subsection must be made as follows: The demonstrations in (a) 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) of this subsection must be made at least thirty days prior to the expiration of the specified one hundred eighty-day period unless the owner or operator is otherwise subject to the deadlines in (d) of this subsection.

(d) The department may allow an owner or operator to receive only nondangerous wastes in a landfill, land treatment, or surface impoundment unit after the final receipt of dangerous wastes at that unit if:

(i) The owner or operator requests a permit modification in compliance with all applicable requirements in WAC 173-303-830 and 40 CFR Part 124 and in the permit modification request demonstrates that:

(A) The unit has the existing design capacity as indicated on the part A application to receive nondangerous wastes; and

(B) There is a reasonable likelihood that the owner or operator or another person will receive nondangerous wastes in the unit within one year after the final receipt of dangerous wastes; and

(C) The nondangerous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under this part; and

(D) Closure of the dangerous waste management unit would be incompatible with continued operation of the unit or facility; and

(E) The owner or operator is operating and will continue to operate in compliance with all applicable permit requirements; and

(ii) The request to modify the permit includes an amended wastes analysis plan, ground water monitoring and response program, human exposure assessment required under RCRA section 3019, and closure and postclosure plan, and updated cost estimates and demonstrations of financial assurance for closure and postclosure 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)(vii) of this section, as a result of the receipt of nondangerous wastes following the final receipt of dangerous wastes; and

(iii) The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of nondangerous wastes following receipt of the final volume of dangerous wastes; and

(iv) The request to modify the permit and the demonstration referred to in (d)(i) and (ii) of this subsection are submitted to the department no later than one hundred twenty days prior to the date on which the owner or operator of the facility receives the known final volume of dangerous wastes at the unit, or no later than ninety days after the effective date of this rule in the state in which the unit is located, whichever is later.

(e) In addition to the requirements in (d) of this subsection, an owner or operator of a dangerous wastes surface impoundment that is not in compliance with the liner and leachate collection system requirements in 42 U.S.C. 3004 (o)(1) and 3005 (j)(1) or 42 U.S.C. 3004 (o)(2) or (3) or 3005 (j)(2), (3), (4) or (13) must:

(i) Submit with the request to modify the permit:

(A) A contingent corrective measures plan, unless a corrective action plan has already been submitted under WAC 173-303-645(10); and

(B) A plan for removing dangerous wastes in compliance with (e)(ii) of this subsection; and

(ii) Remove all dangerous wastes from the unit by removing all dangerous liquids, and removing all dangerous sludges to the extent practicable without impairing the integrity of the liner(s), if any.

(iii) Removal of dangerous wastes must be completed no later than ninety days after the final receipt of dangerous wastes. The department may approve an extension to this deadline if the owner or operator demonstrates that the removal of dangerous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.

(iv) If a release that is a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters of constituents specified in the permit or that exceeds the facility's ground water protection standard at the point of compliance, if applicable, is detected in accordance with the requirements in WAC 173-303-645, the owner or operator of the unit:

(A) Must implement corrective measures in accordance with the approved contingent corrective measures plan required by (e)(i) of this subsection no later than one year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;

(B) May continue to receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and

(C) May be required by the department to implement corrective measures in less than one year or to cease the receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.

(v) During the period of corrective action, the owner or operator must provide semiannual reports to the department that describe the progress of the corrective action program, compile all ground water monitoring data, and evaluate the effect of the continued receipt of nondangerous wastes on the effectiveness of the corrective action.

(vi) The department may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one year as required in (e)(iv) of this subsection, or fails to make substantial progress in implementing corrective action and achieving the facility's ground water protection standard or background levels if the facility has not yet established a ground water protection standard.

(vii) If the owner or operator fails to implement corrective measures as required in (e)(iv) of this subsection or if the department determines that substantial progress has not been made pursuant to (e)(vi) of this subsection the department will:

(A) Notify the owner or operator in writing that the owner or operator must begin closure in accordance with the deadline in (a) and (b) of this subsection and provide a detailed statement of reasons for this determination; and

(B) Provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than twenty days after the date of the notice.

(C) If the department receives no written comments, the decision will become final five days after the close of the comment period. The department will notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, must be submitted within fifteen days of the final notice and that closure must begin in accordance with the deadlines in (a) and (b) of this subsection.

(D) If the department receives written comments on the decision, it will make a final decision within thirty days after the end of the comment period, and provide the owner or operator in writing and the public through a newspaper notice, a detailed statement of reasons for the final decision. If the department determines that substantial progress has not been made, closure must be initiated in accordance with the deadlines in (a) and (b) of this subsection.

(E) The final determinations made by the department under (e)(vii)(C) and (D) of this subsection are not subject to administrative appeal.

(5) Disposal or decontamination of equipment, structures and soils. During the partial and final closure periods, all contaminated equipment, structures and soils must be properly disposed of or decontaminated unless otherwise specified in WAC 173-303-640(8), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), or under the authority of WAC 173-303-680 (2) and (4). By removing any dangerous wastes or dangerous constituents during partial and final closure, the owner or operator may become a generator of dangerous waste and must handle that waste in accordance with all applicable requirements of WAC 173-303-170 through 173-303-230.

(6) Certification of closure. Within sixty days of completion of closure of each dangerous waste management unit (including tank systems and container storage areas), and within sixty days of the completion of final closure, the owner or operator must submit to the department by registered mail, a certification that the dangerous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the department upon request until it releases the owner or operator from the financial assurance requirements for closure under WAC 173-303-620(4).

(7) Postclosure care and use of property.

(a) Postclosure care for each dangerous waste management unit subject to postclosure requirements must begin after completion of closure of the unit and continue for thirty years after that date and must consist of at least the following:

(i) Ground water monitoring and reporting as 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 postclosure care requirements or final closure, or any time during the postclosure period for a particular unit, the department may, in accordance with the permit modification procedures in WAC 173-303-800 through 173-303-840:

(i) Shorten the postclosure care period applicable to the dangerous waste management unit, or facility, if all disposal units have been closed, if it finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or ground water monitoring results, characteristics of the dangerous waste, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the dangerous waste management unit or facility is secure); or

(ii) Extend the postclosure care period applicable to the dangerous waste management unit or facility if it finds that the extended period is necessary to protect human health and the environment (e.g., leachate or ground water monitoring results indicate a potential for migration of dangerous waste at levels which may be harmful to human health and the environment).

(c) The department may require, at partial or final closure, continuation of any of the security requirements of WAC 173-303-310 during part or all of the postclosure period when:

(i) Dangerous wastes may remain exposed after completion of partial or final closure; or

(ii) Access by the public or domestic livestock may pose a hazard to human health.

(d) Postclosure use of property on or in which dangerous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of any containment system, or the function of the facility's monitoring systems, unless the department finds that the disturbance:

(i) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(ii) Is necessary to reduce a threat to human health or the environment.

(e) All postclosure care activities must be in accordance with the provisions of the approved postclosure plan as specified in subsection (8) of this section.

(8) Postclosure plan; amendment of plan.

(a) The owner or operator of a dangerous waste disposal unit must have a written postclosure plan. In addition, certain 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 postclosure plans. Owners or operators of surface impoundments and waste piles not otherwise required to prepare contingent postclosure plans under WAC 173-303-650 or 173-303-660 must submit a postclosure 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 postclosure requirements. The plan must be submitted with the permit application, in accordance with WAC 173-303-806, and approved by the department as part of the permit issuance procedures under WAC 173-303-840. The approved postclosure plan will become a condition of any permit issued.

(b) For each dangerous waste management unit subject to the requirements of this subsection, the postclosure plan must identify the activities which will be carried on after closure and the frequency of these activities, and include at least:

(i) A description of the planned ground water monitoring activities and frequencies at which they will be performed;

(ii) A description of the planned maintenance activities, and frequencies at which they will be performed to comply with WAC 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680 during the postclosure 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) And the name, address, and phone number of the person or office to contact about the dangerous waste disposal unit or facility during the postclosure care period.

(c) Until final closure of the facility, a copy of the approved postclosure plan must be furnished to the department upon request, including request by mail. After final closure has been certified, the person or office specified in (b)(iii) of this subsection must keep the approved postclosure plan during the remainder of the postclosure 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 postclosure 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 postclosure 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 postclosure plan at any time during the active life of the facility or during the postclosure care period.

(ii) The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved postclosure plan whenever:

(A) Changes in operating plans or facility design affect the approved postclosure plan; or

(B) There is a change in the expected year of final closure, if applicable; or

(C) Events which occur during the active life of the facility, including partial and final closures, affect the approved postclosure plan.

(iii) The owner or operator must submit a written request for a permit modification at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the postclosure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all dangerous waste at closure and is not otherwise required to submit a contingent postclosure plan under WAC 173-303-650 or 173-303-660 must submit a postclosure plan to the department no later than ninety days after the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the requirements of WAC 173-303-665. The department will approve, disapprove, or modify this plan in accordance with the procedures in WAC 173-303-800 through 173-303-840. The approved postclosure plan will become a permit condition.

(iv) The department may request modifications to the plan under the conditions described in (d)(ii) of this subsection. The owner or operator must submit the modified plan no later than sixty days after the department's request, or no later than ninety days if the unit is a surface impoundment or waste pile not previously required to prepare a contingent postclosure plan. Any modifications requested by the department will be approved, disapproved, or modified in accordance with the procedures in WAC 173-303-800 through 173-303-840.

(9) Notice to local land authority. No later than the submission of the certification of closure of each dangerous waste disposal unit, the owner or operator of a disposal facility must submit to the local zoning authority or the authority with jurisdiction over local land use and to the department a survey plat indicating the location and dimensions of landfill cells or other dangerous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or the authority with jurisdiction over local land use must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the dangerous waste disposal unit in accordance with the applicable requirements of this section. In addition, no later than sixty days after certification of closure of each dangerous waste disposal unit, the owner or operator must submit to the local zoning authority or the authority with jurisdiction over local land use and to the department, a record of the type, location, and quantity of dangerous wastes disposed of within each cell or other disposal unit of the facility. For wastes disposed of before November 19, 1980 (March 12, 1982, for facilities subject to this chapter but not subject to 40 CFR Part 264), the owner or operator must identify the type, location, and quantity of the dangerous wastes to the

best of his knowledge and in accordance with any records he has kept.

(10) Notice in deed to property.

(a) No later than sixty days after certification of closure of each dangerous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the department a record of the type, location, and quantity of dangerous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes (as defined in WAC 173-303-040) disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the dangerous wastes to the best of his knowledge and in accordance with any records he has kept.

(b) Within sixty days of certification of closure of the first dangerous waste disposal unit and within sixty days of certification of closure of the last dangerous waste disposal unit, the owner or operator must:

(i) Record, in accordance with state law, a notation on the deed to the facility property, or on some other instrument which is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that:

(A) The land has been used to manage dangerous wastes;

(B) Its use is restricted under this section; and

(C) The survey plat and record of the type, location, and quantity of dangerous wastes disposed of within each cell or other dangerous waste disposal unit of the facility required in subsection (9) of this section have been filed with the local zoning authority, or the authority with jurisdiction over local land use, and with the department; and

(ii) Submit a certification, signed by the owner or operator, that he has recorded the notation specified in (b)(i) of this subsection, including a copy of the document in which the notation has been placed, to the department.

(c) If the owner or operator or any subsequent owner of the land upon which a dangerous waste facility was located wishes to remove dangerous wastes and dangerous waste residues, the liner, if any, or contaminated soils, he must request a modification to the postclosure permit in accordance with the applicable requirements in WAC 173-303-800 through 173-303-840. The owner or operator must demonstrate that the removal of dangerous wastes will satisfy the criteria of subsection (7)(d) of this section. By removing dangerous waste, the owner or operator may become a generator of dangerous waste and must manage it in accordance with all applicable requirements of this chapter. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the department approve either:

(i) The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

(ii) The addition of a notation to the deed or instrument indicating the removal of the dangerous waste.

(11) Certification of completion of postclosure care. No later than sixty days after completion of the established postclosure care period for each dangerous waste disposal unit, the owner or operator must submit to the department, by registered mail, a certification that the postclosure care period for the dangerous waste disposal unit was performed in accordance with the specifications in the approved postclosure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the department upon request until he releases the owner or operator from the financial assurance requirements for postclosure care under WAC 173-303-620(6).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-610, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-610, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-610, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-610, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-610, filed 6/26/87; 84-14-031 (Order DE 84-22), § 173-303-610, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-610, filed 2/10/82.]

WAC 173-303-620 Financial requirements. (1) Applicability.

(a) The requirements of subsections (3), (4), (7), (8), (9), and (10) of this section, apply to owners and operators of all dangerous waste facilities, except as provided otherwise in this section.

(b) The requirements of subsections (5) and (6) of this section apply to owners and operators of:

(i) Dangerous waste disposal facilities;

(ii) Tank systems that are required under WAC 173-303-640(8) to meet the requirements of landfills;

(iii) Miscellaneous units as specified in WAC 173-303-680(4);

(iv) Waste piles and surface impoundments to the extent that WAC 173-303-650 and 173-303-660, respectively, require that such facilities comply with this section; and

(v) Containment buildings that are required under WAC 173-303-695 to meet the requirements for landfills.

(c) States and the federal government, and 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.

(2) Definitions. As used in this section, the following listed or referenced terms have the meanings given below:

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of WAC 173-303-610(3);

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with subsection (3) of this section;

(c) "Current postclosure cost estimate" means the most recent of the estimates prepared in accordance with subsection (5) of this section;

(d) "Parent corporation" means a corporation which directly owns at least fifty percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation;

(e) "Postclosure plan" means the plan for postclosure care prepared in accordance with the requirements of WAC 173-303-610 (7), (8), (9), and (10);

(f) "Regional administrator" means the department;

(g) "Hazardous waste" means dangerous waste; and

(h) The additional terms listed and defined in 40 CFR 264.141 (f), (g), and (h) are adopted by reference.

(3) Cost estimate for facility closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in WAC 173-303-610 (2) through (6), and applicable closure requirements in WAC 173-303-630(10), 173-303-640(5), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680 (2) through (4) and 173-303-695. The closure cost estimate:

(i) Must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see WAC 173-303-610 (3)(a));

(ii) Must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in subsection (2)(d) of this section.) The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility;

(iii) May not incorporate any salvage value that may be realized with the sale of dangerous wastes, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure; and

(iv) May not incorporate a zero cost for dangerous wastes, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), that might have economic value.

(b) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than thirty days after the department has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in (c)(i) and (ii) of this subsection.

(c) During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with this section. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before submission of updated information to the department as specified in subsection (4) of this section. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent *Implicit Price Deflator for Gross National Product* as published by the United States Department of Commerce in its survey of current business. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

(i) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(d) During the operating life of the facility, the owner or operator must keep at the facility the latest closure cost estimate prepared in accordance with (a) and (b) of this subsection, and, when this estimate has been adjusted in accordance with (c) of this subsection, the latest adjusted closure cost estimate.

(4) Financial assurance for facility closure.

(a) An owner or operator of a TSD facility must establish financial assurance for closure of the facility. The owner or operator must choose from the following options or combination of options:

(i) Closure trust fund;

(ii) Surety bond guaranteeing payment into a closure trust fund;

(iii) Surety bond guaranteeing performance of closure;

(iv) Closure letter of credit;

(v) Closure insurance; or

(vi) Financial test and corporate guarantee for closure.

(b) In satisfying the requirements of financial assurance for facility closure in this subsection, the owner or operator must meet all the requirements set forth in 40 CFR 264.143.

(5) Cost estimate for postclosure monitoring and maintenance.

(a) The owner or operator of a facility subject to postclosure monitoring or maintenance requirements must have a detailed written estimate, in current dollars, of the annual cost of postclosure monitoring and maintenance of the facility in accordance with the applicable postclosure regulations in WAC 173-303-610 (7) through (10), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), and 173-303-680(4). The postclosure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct postclosure care activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in subsection (2)(d) of this section.) The postclosure cost estimate is calculated by multiplying the annual postclosure cost estimate by the number of years of postclosure care required by WAC 173-303-610.

(b) During the active life of the facility, the owner or operator must revise the postclosure cost estimate within thirty days after the department has approved the request to modify the postclosure plan, if the change in the postclosure plan increases the cost of postclosure care. The revised postclosure cost estimate must be adjusted for inflation as specified in (c)(i) and (ii) of this subsection.

(c) During the active life of the facility, the owner or operator must adjust the postclosure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with subsection (6) of this section. For owners or operators using the financial test or corporate guarantee, the postclosure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before the submission of updated information to the department as specified in subsection (6) of this section. The adjustment may be made by recalculating the postclosure cost estimate in current dollars or by using an inflation factor

derived from the most recent Implicit Price Deflator for Gross National Product as published by the United States Department of Commerce in its Survey of Current Business. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

(i) The first adjustment is made by multiplying the postclosure cost estimate by the inflation factor. The result is the adjusted postclosure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted postclosure cost estimate by the latest inflation factor.

(d) During the operating life of the facility, the owner or operator must keep at the facility the latest postclosure cost estimate prepared in accordance with (a) and (b) of this subsection, and, when this estimate has been adjusted in accordance with (c) of this subsection, the latest adjusted postclosure cost estimate.

(6) Financial assurance for postclosure monitoring and maintenance.

(a) An owner or operator of a facility subject to postclosure monitoring or maintenance requirements must establish financial assurance for postclosure care in accordance with the approved postclosure care plan. He must choose from the following options or combination of options:

(i) Postclosure trust fund;

(ii) Surety bond guaranteeing payment into a postclosure trust fund;

(iii) Surety bond guaranteeing performance of postclosure care;

(iv) Postclosure letter of credit;

(v) Postclosure insurance; or

(vi) Financial test and corporate guarantee for postclosure care.

(b) In satisfying the requirements of financial assurance for facility postclosure care in this subsection, the owner or operator must meet all the requirements set forth in 40 CFR 264.145.

(7) Use of a mechanism for financial assurance of both closure and postclosure care. An owner or operator may satisfy the requirements for financial assurance for both closure and postclosure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both 40 CFR 264.143 and 264.145. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of postclosure care.

(8) Liability requirements.

(a) An owner or operator of a TSD facility or a group of such facilities must demonstrate financial responsibility for bodily injury and property damages to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must meet the requirements of 40 CFR 264.147(a).

(b) An owner or operator of a facility with a regulated unit or units (as defined in WAC 173-303-040) or a disposal miscellaneous unit or units used to manage dangerous waste or a group of such facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must meet the requirements of 40 CFR 264.147(b), 264.177 (f), (g), (h), (i), and (j).

(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 260.147(f), Financial test for liability coverage, (g) Guarantee for liability coverage, (h) Letter of credit for liability coverage, (i) Surety bond for liability coverage, and (j) Trust fund for liability coverage.

(9) Incapacity of owners or operators, guarantor or financial institutions.

(a) An owner or operator must notify the department by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), United States Code, naming the owner or operator as debtor, within ten days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in 40 CFR 264.143(f) and 264.145(f) must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (40 CFR 264.151(h)).

(b) An owner or operator who fulfills the requirements of 40 CFR 264.143, 264.145, or 264.147 (a) or (b) by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within sixty days after such an event.

(10) Wording of the instruments. The financial instruments required by this section must contain the wording specified by 40 CFR 264.151, except that:

(a) The words "regional administrator" and "environmental protection agency" must be replaced with the word "department";

(b) The words "hazardous waste" must be replaced with the words "dangerous waste"; and

(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.

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. 95-22-008 (Order 94-30), § 173-303-620, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-620, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-620, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-620, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-620, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-620, filed 2/10/82. Formerly WAC 173-302-340.]

WAC 173-303-630 Use and management of containers. (1) Applicability. The regulations in this section apply to owners and operators of all dangerous waste facilities that store containers of dangerous waste.

(2) Condition of containers. If a container holding dangerous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the dangerous waste from the container to a container that is in good condition or manage the waste in some other way that complies with the requirements of chapter 173-303 WAC. In addition, the owner or operator must address leaks and spills in accordance with the applicable provisions of WAC 173-303-145 and 173-303-360.

(3) Identification of containers. The owner or operator must label containers in a manner which adequately identifies the major risk(s) associated with the contents of the containers for employees, emergency response personnel and the public (Note—If there is already a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate). The owner or operator must affix labels upon transfer of dangerous wastes from one container to another. The owner or operator must destroy or otherwise remove labels from the emptied container, unless the container will continue to be used for storing dangerous waste at the facility. The owner or operator must ensure that labels are not obscured, removed, or otherwise unreadable in the course of inspection required under WAC 173-303-320.

(4) Compatibility of waste with containers. The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the dangerous waste to be stored, so that the ability of the container to contain the waste is not impaired.

(5) Management of containers.

(a) A container holding dangerous waste must always be closed, except when it is necessary to add or remove waste.

(b) A container holding dangerous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

(c) A minimum thirty-inch separation is required between aisles of containers holding dangerous waste(s). A row of drums must be no more than two drums wide.

(6) Inspections. At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion, deterioration, or other factors. The owner or operator must keep an inspection log including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made and the date and nature of any repairs or remedial actions taken. The log must be kept at the facility for at least five years from the date of inspection.

(7) Containment.

(a) Container storage areas must have a containment system that is capable of collecting and holding spills and leaks. In addition to the necessary leak containment capacity, uncovered storage areas must be capable of holding the 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 Uniform Fire Code's *"American Table of Distances for Storage of Explosives,"* Table 77-201, 1979 edition or the version adopted by the local fire district.

(b) The owner or operator must design, operate, and maintain ignitable waste and reactive waste (other than a reactive waste which must meet (a) of this subsection) container storage in a manner equivalent with the Uniform Fire Code. Where no specific standard or requirements are specified in the Uniform Fire Code, or in existing state or local fire codes, applicable sections of the NFPA Pamphlet # 30, *"Flammable and Combustible Liquids Code,"* must be used. The owner/operator must also comply with the requirements of WAC 173-303-395 (1)(d).

(9) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials must not be placed in the same container, unless WAC 173-303-395 (1)(b) is complied with.

(b) Dangerous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

(c) A storage container holding a dangerous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device. Containment systems for incompatible wastes must be separate.

(10) Closure. At closure, all dangerous waste and dangerous waste residues must be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with dangerous waste or dangerous waste residues must be decontaminated or removed.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-630, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-630, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-630, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-630, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-630, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-630, filed 2/10/82.]

WAC 173-303-640 Tank systems. (1) Applicability.

(a) The regulations in WAC 173-303-640 apply to owners and operators of facilities that use tank systems to treat or store dangerous waste, except as (b), (c), and (d) of this subsection provides otherwise.

(b) Tank systems that are used to store or treat dangerous waste which contain no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in subsection (4) of this section. To demonstrate the absence or presence of free liquids in the stored/treated waste, the test method described in WAC 173-303-110 (3)(c)(i) must be used.

(c) Tank systems, including sumps, as defined in WAC 173-303-040, that serve as part of a secondary containment system to collect or contain releases of dangerous wastes are exempted from the requirements in subsection (4)(a) of this section.

(d) Tanks, sumps, and other such collection devices or systems used in conjunction with drip pads, as defined in WAC 173-303-040 and regulated under WAC 173-303-675, must meet the requirements of this section.

(2) Assessment of existing tank system's integrity.

(a) For each existing tank system, the owner or operator must determine that the tank system is not leaking or is unfit for use. Except as provided in (b) of this subsection, the owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified registered professional engineer, in accordance with WAC 173-303-810 (13)(a), that attests to the tank system's integrity by January 12, 1988, for underground tanks that do not meet the requirements of subsection (4) of this section and that cannot be entered for inspection, or by January 12, 1990, for all other tank systems.

(b) Tank systems that store or treat materials that become dangerous wastes subsequent to January 12, 1989, must conduct this assessment within twelve months after the date that the waste becomes a dangerous waste.

(c) This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

(i) Design standard(s), if available, according to which the tank system was constructed;

(ii) Dangerous characteristics of the waste(s) that have been and will be handled;

(iii) Existing corrosion protection measures;

(iv) Documented age of the tank system, if available (otherwise, an estimate of the age); and

(v) Results of a leak test, internal inspection, or other tank system integrity examination such that:

(A) For nonenterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects; and

(B) For other than nonenterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination, that is certified by an independent, qualified, registered professional engineer, in accordance with WAC 173-303-810 (13)(a), that addresses cracks, leaks, corrosion, and erosion.

Note: The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines in conducting other than a leak test.

(d) If, as a result of the assessment conducted in accordance with (a) of this subsection, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of subsection (7) of this section.

(e) The owner or operator must develop a schedule for conducting integrity assessments over the life of the tank to ensure that the tank retains its structural integrity and will not collapse, rupture, or fail. The schedule must be based on the results of past integrity assessments, age of the tank system, materials of construction, characteristics of the waste, and any other relevant factors.

(3) Design and installation of new tank systems or components.

(a) Owners or operators of new tank systems or components must obtain (and for facilities that are pursuing or have obtained a final status permit, submit to the department, at time of submittal of Part B information) a written assessment, reviewed and certified by an independent, qualified registered professional engineer, in accordance with WAC 173-303-810 (13)(a), attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of dangerous waste. The assessment must show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection to ensure that it will not collapse, rupture, or fail. This assessment (which will be used by the department to review and approve or disapprove the acceptability of the tank system design at facilities which are pursuing or have obtained a final status permit) must include, at a minimum, the following information:

(i) Design standard(s) according to which tank system(s) are constructed;

(ii) Dangerous characteristics of the waste(s) to be handled;

(iii) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of:

(A) Factors affecting the potential for corrosion, including but not limited to:

(I) Soil moisture content;

(II) Soil pH;

(III) Soil sulfides level;

(IV) Soil resistivity;

(V) Structure to soil potential;

(VI) Influence of nearby underground metal structures (e.g., piping);

(VII) Existence of stray electric current;

(VIII) Existing corrosion-protection measures (e.g., coating, cathodic protection); and

(B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:

(I) Corrosion-resistant materials of construction such as special alloys, fiberglass reinforced plastic, etc.;

(II) Corrosion-resistant coating (such as epoxy, fiberglass, etc.,) with cathodic protection (e.g., impressed current or sacrificial anodes); and

(III) Electrical isolation devices such as insulating joints, flanges, etc.

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

(iv) For underground tank system components that are likely to be adversely affected by vehicular traffic, a 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 tank systems or components, prior to their being put into service;

(ii) For all existing tank systems used to store or treat Dangerous Waste Nos. F020, F021, F022, F023, F026, and F027, within two years after January 12, 1989;

(iii) For those existing tank systems of known and documented age, within two years after January 12, 1989, or when the tank system has reached fifteen years of age, whichever comes later;

(iv) For those existing tank systems for which the age cannot be documented, within eight years of January 12, 1989; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches fifteen years of age, or within two years of January 12, 1989, whichever comes later; and

(v) For tank systems that store or treat materials that become dangerous wastes subsequent to January 12, 1989, within the time intervals required in (a)(i) through (iv) of this subsection, except that the date that a material becomes a dangerous waste must be used in place of January 12, 1989.

(b) Secondary containment systems must be:

(i) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and

(ii) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(c) To meet the requirements of (b) of this subsection, secondary containment systems must be at a minimum:

(i) Constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operations (including stresses from nearby vehicular traffic);

(ii) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(iii) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of dangerous waste or accumulated liquid in the secondary containment system within twenty-four hours, or at the earliest practicable time if the owner or operator can demonstrate to the department that existing detection technologies or site conditions will not allow detection of a release within twenty-four hours; and

(iv) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within twenty-four hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the department that removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four hours.

Note: If the collected material is a dangerous waste under WAC 173-303-070, it is subject to management as a dangerous waste in

accordance with all applicable requirements of WAC 173-303-170 through 173-303-400 and WAC 173-303-600 through 173-303-695. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water Act, as amended. If discharged to a publicly owned treatment works (POTW), it is subject to the requirements of section 307 of the Clean Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR Part 302.

(d) Secondary containment for tanks must include one or more of the following devices:

(i) A liner (external to the tank);

(ii) A vault;

(iii) A double-walled tank; or

(iv) An equivalent device as approved by the department.

(e) In addition to the requirements of (b), (c), and (d) of this subsection, secondary containment systems must satisfy the following requirements:

(i) External liner systems must be:

(A) Designed or operated to contain one hundred percent of the capacity of the largest tank within its boundary;

(B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a twenty-five-year, twenty-four-hour rainfall event.

(C) Free of cracks or gaps; and

(D) Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste).

(ii) Vault systems must be:

(A) Designed or operated to contain one hundred percent of the capacity of the largest tank within its boundary;

(B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a twenty-five-year, twenty-four-hour rainfall event;

(C) Constructed with chemical-resistant water stops in place at all joints (if any);

(D) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;

(E) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:

(I) Meets the definition of ignitable waste under WAC 173-303-090(5); or

(II) Meets the definition of reactive waste under WAC 173-303-090(7), and may form an ignitable or explosive vapor.

(F) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(iii) Double-walled tanks must be:

(A) Designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

(B) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(C) Provided with a built-in continuous leak detection system capable of detecting a release within twenty-four hours, or at the earliest practicable time, if the owner or operator can demonstrate to the department, and the department concludes, that the existing detection technology or site conditions would not allow detection of a release within twenty-four hours.

Note: The provisions outlined in the Steel Tank Institute's (STI) "Standard for Dual Wall Underground Steel Storage Tanks" may be used as guidelines for aspects of the design of underground steel double-walled tanks.

(f) Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of (b) and (c) of this subsection except for:

(i) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

(ii) Welded flanges, welded joints, and welded connections, that are visually inspected for leaks on a daily basis;

(iii) Sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and

(iv) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

(g) The owner or operator may obtain a variance from the requirements of this subsection if the department finds, as a result of a demonstration by the owner or operator that alternative design and operating practices, together with location characteristics, will prevent the migration of any dangerous waste or dangerous constituents into the ground water, or surface water at least as effectively as secondary containment during the active life of the tank system or that in the event of a release that does migrate to ground water or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with (g)(ii) of this subsection, be exempted from the secondary containment requirements of this section.

(i) In deciding whether to grant a variance based on a demonstration of equivalent protection of ground water and surface water, the department will consider:

(A) The nature and quantity of the wastes;

(B) The proposed alternate design and operation;

(C) The hydrogeologic setting of the facility, including the thickness of soils present between the tank system and ground water; and

(D) All other factors that would influence the quality and mobility of the dangerous constituents and the potential for them to migrate to ground water or surface water.

(ii) In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the department will consider:

(A) The potential adverse effects on ground water, surface water, and land quality taking into account:

(I) The physical and chemical characteristics of the waste in the tank system, including its potential for migration;

(II) The hydrogeological characteristics of the facility and surrounding land;

(III) The potential for health risks caused by human exposure to waste constituents;

(IV) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(V) The persistence and permanence of the potential adverse effects.

(B) The potential adverse effects of a release on ground-water quality, taking into account:

(I) The quantity and quality of ground water and the direction of ground-water flow;

(II) The proximity and withdrawal rates of ground-water users;

(III) The current and future uses of ground water in the area; and

(IV) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground-water quality.

(C) The potential adverse effects of a release on surface water quality, taking into account:

(I) The quantity and quality of ground water and the direction of ground-water flow;

(II) The patterns of rainfall in the region;

(III) The proximity of the tank system to surface waters;

(IV) The current and future uses of surface waters in the area and any water quality standards established for those surface waters; and

(V) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality.

(D) The potential adverse effects of a release on the land surrounding the tank system, taking into account:

(I) The patterns of rainfall in the region; and

(II) The current and future uses of the surrounding land.

(iii) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of (g)(i) of this subsection, at which a release of dangerous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), must:

(A) Comply with the requirements of subsection (7) of this section, except subsection (7)(d) of this section; and

(B) Decontaminate or remove contaminated soil to the extent necessary to:

(I) Enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and

(II) Prevent the migration of dangerous waste or dangerous constituents to ground water or surface water.

(C) If contaminated soil cannot be removed or decontaminated in accordance with (g)(iii)(B) of this subsection, comply with the requirements of subsection (8) of this section.

(iv) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of (g)(i) of this subsection, at which a release of dangerous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), must:

(A) Comply with the requirements of subsection (7)(a), (b), (c), and (d) of this section; and

(B) Prevent the migration of dangerous waste or dangerous constituents to ground water or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if ground water has been contaminated, the owner or operator must comply with the requirements of subsection (8)(b) of this section; and

(C) If repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with the requirements of (a) through (f) of this subsection or reapply for a variance from secondary containment and meet the requirements for new tank systems in subsection (3) of this section if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil can be decontaminated or removed and ground water or surface water has not been contaminated.

(h) The following procedures must be followed in order to request a variance from secondary containment:

(i) The department must be notified in writing by the owner or operator that he intends to conduct and submit a demonstration for a variance from secondary containment as allowed in (g) of this subsection according to the following schedule:

(A) For existing tank systems, at least twenty-four months prior to the date that secondary containment must be provided in accordance with (a) of this subsection.

(B) For new tank systems, at least thirty days prior to entering into a contract for installation.

(ii) As part of the notification, the owner or operator must also submit to the department a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in (g)(i) or (ii) of this subsection;

(iii) The demonstration for a variance must be completed within one hundred eighty days after notifying the department of an intent to conduct the demonstration; and

(iv) If a variance is granted under this subsection, the department will require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

(i) All tank systems, until such time as secondary containment that meets the requirements of this section is provided, must comply with the following:

(A) For nonenterable underground tanks, a leak test that meets the requirements of subsection (2)(c)(v) of this section or other tank integrity method, as approved or required by the department, must be conducted at least annually.

(B) For other than nonenterable underground tanks, the owner or operator must either conduct a leak test as in (i)(A) of this subsection or develop a schedule and procedure for an assessment of the overall condition of the tank system by

an independent, qualified registered professional engineer. The schedule and procedure must be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments must be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection, and the characteristics of the waste being stored or treated.

(C) For ancillary equipment, a leak test or other integrity assessment as approved by the department must be conducted at least annually.

Note: The practices described in the American Petroleum Institute (API) Publication Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines for assessing the overall condition of the tank system.

(D) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with (h)(iv)(A) through (C) of this subsection.

(E) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in (h)(iv)(A) through (C) of this subsection, the owner or operator must comply with the requirements of subsection (7) of this section.

(5) General operating requirements.

(a) Dangerous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

(b) The owner or operator must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:

(i) Spill prevention controls (e.g., check valves, dry disconnect couplings);

(ii) Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

(iii) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

(c) The owner or operator must comply with the requirements of subsection (7) of this section if a leak or spill occurs in the tank system.

(d) All tank systems holding dangerous waste must be marked with labels or signs to identify the waste contained in the tank. The label or sign must be legible at a distance of at least fifty feet, and must bear a legend which identifies the waste in a manner which adequately warns employees, emergency response personnel, and the public of the major risk(s) associated with the waste being stored or treated in the tank system(s). (Note—If there already is a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate.)

(e) All tank systems holding dangerous wastes which are acutely or chronically toxic by inhalation must be designed to prevent escape of vapors, fumes, or other emissions into the air.

(6) Inspections.

(a) The owner or operator must develop and follow a schedule and procedure for inspecting overfill controls.

(b) The owner or operator must inspect at least once each operating day:

(i) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

(ii) Data gathered from monitoring any leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and

(iii) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of dangerous waste (e.g., wet spots, dead vegetation).

Note: WAC 173-303-320 requires the owner or operator to remedy any deterioration or malfunction he finds. Subsection (7) of this section requires the owner or operator to notify the department within twenty-four hours of confirming a leak. Also, 40 CFR Part 302 may require the owner or operator to notify the National Response Center of a release.

(c) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

(i) The proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and

(ii) All sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month).

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

(d) The owner or operator must document in the operating record of the facility an inspection of those items in (a) through (c) of this subsection. The owner or operator must keep an inspection log including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made and the date and nature of any repairs or remedial actions taken. The log must be kept at the facility for at least five years from the date of inspection.

(7) Response to leaks or spills and disposition of leaking or unfit-for-use tank systems.

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:

(a) Cessation of use; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of dangerous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(b) Removal of waste from tank system or secondary containment system.

(i) If the release was from the tank system, the owner/operator must, within twenty-four hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of dangerous waste to the environment and to allow inspection and repair of the tank system to be performed.

(ii) If the material released was to a secondary containment system, all released materials must be removed within twenty-four hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) Containment of visible releases to the environment. The owner/operator must immediately conduct a visual inspection of the release and, based upon that inspection:

(i) Prevent further migration of the leak or spill to soils or surface water; and

(ii) Remove, and properly dispose of, any visible contamination of the soil or surface water.

(d) Notifications, reports.

(i) Any release to the environment, except as provided in (d)(ii) of this subsection, must be reported to the department within twenty-four hours of its detection. Any release above the "reportable quantity" must also be reported to the National Response Center pursuant to 40 CFR Part 302.

(ii) A leak or spill of dangerous waste is exempted from the requirements of (d) of this subsection if it is:

(A) Less than or equal to a quantity of one pound, or the "Reportable Quantity" (RQ) established in 40 CFR Part 302, whichever is less; and

(B) Immediately contained and cleaned-up.

(iii) Within thirty days of detection of a release to the environment, a report containing the following information must be submitted to the department:

(A) Likely route of migration of the release;

(B) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

(C) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within thirty days, these data must be submitted to the department as soon as they become available;

(D) Proximity to downgradient drinking water, surface water, and populated areas; and

(E) Description of response actions taken or planned.

(e) Provision of secondary containment, repair, or closure.

(i) Unless the owner/operator satisfies the requirements of (e)(ii) through (iv) of this subsection, the tank system must be closed in accordance with subsection (8) of this section.

(ii) If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

(iii) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

(iv) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of subsection (4) of this section before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of (f) of this subsection are satisfied. If a component is replaced to comply with the requirements of this subitem, that component must satisfy the requirements for new tank systems or components in subsections (3) and (4) of this section. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with subsection (4) of this section prior to being returned to use.

(f) Certification of major repairs. If the owner/operator has repaired a tank system in accordance with (e) of this subsection, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner/operator has obtained a certification by an independent, qualified, registered, professional engineer in accordance with WAC 173-303-810 (13)(a) that the repaired system is capable of handling dangerous wastes without release for the intended life of the system. This certification must be submitted to the department within seven days after returning the tank system to use.

Note: See WAC 173-303-320 for the requirements necessary to remedy a failure. Also, 40 CFR Part 302 may require the owner or operator to notify the National Response Center of certain releases.

(8) Closure and post-closure care.

(a) At closure of a tank system, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as dangerous waste, unless WAC 173-303-070 (2)(a) applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems must meet all of the requirements specified in WAC 173-303-610 and 173-303-620.

(b) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in (a) of this subsection, then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (see WAC 173-303-665(6)). In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in WAC 173-303-610 and 173-303-620.

(c) If an owner or operator has a tank system that does not have secondary containment that meets the requirements of subsection (4)(b) through (f) of this section and is not

exempt from the secondary containment requirements in accordance with subsection (4)(g) of this section, then:

(i) The closure plan for the tank system must include both a plan for complying with (a) of this subsection and a contingent plan for complying with (b) of this subsection.

(ii) A contingent post-closure plan for complying with (b) of this subsection must be prepared and submitted as part of the permit application.

(iii) The cost estimates calculated for closure and post-closure care must reflect the costs of complying with the contingent closure plan and the contingent post-closure plan, if those costs are greater than the costs of complying with the closure plan prepared for the expected closure under (a) of this subsection.

(iv) Financial assurance must be based on the cost estimates in (c)(iii) of this subsection.

(v) For the purposes of the contingent closure and post-closure plans, such a tank system is considered to be a landfill, and the contingent plans must meet all of the closure, post-closure, and financial responsibility requirements for landfills under this chapter (WAC 173-303-610 and 173-303-620).

(9) Special requirements for ignitable or reactive wastes.

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

(i) The waste is treated, rendered, or mixed before or immediately after placement in the tank system so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090, and 173-303-395 (1)(b) is complied with; or

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

(iii) The tank system is used solely for emergencies.

(b) The owner or operator of a facility which treats or stores ignitable or reactive waste in tanks must locate the tanks in a manner equivalent to the National Fire Protection Association's buffer zone requirements for tanks, contained in Tables 2-1 through 2-6 of the NFPA-30 *Flammable and Combustible Liquids Code* - 1981, or as required by state and local fire codes when such codes are more stringent. The owner or operator must also comply with the requirements of WAC 173-303-395 (1)(d).

(10) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, must not be placed in the same tank system, unless WAC 173-303-395 (1)(b) is complied with.

(b) Dangerous waste must not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless WAC 173-303-395 (1)(b) is complied with.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-640, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-640, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-640, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-640, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-640, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-640, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-645 Releases from regulated units. (1) Applicability.

(a)(i) Except as provided in (b) of this subsection, the regulations in this section apply to owners and operators of facilities that treat, store, or dispose of dangerous waste. The owner or operator must satisfy the requirements identified in (a)(ii) of this subsection for all wastes (or constituents thereof) contained in solid waste management units at the facility, regardless of the time at which waste was placed in such units.

(ii) All solid waste management units must comply with the requirements in WAC 173-303-646(2). Regulated units (as defined in WAC 173-303-040) must comply with the requirements of subsections (2) through (12) of this section, in lieu of WAC 173-303-646(2), for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The corrective action financial responsibility requirements of WAC 173-303-646(2) apply to corrective action regulated units.

(b) The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under this section if:

(i) The owner or operator is exempted under WAC 173-303-600; or

(ii) He operates a unit which the department finds:

(A) Is an engineered structure;

(B) Does not receive or contain liquid waste or waste containing free liquids;

(C) Is designed and operated to exclude liquid, precipitation, and other run-on and run-off;

(D) Has both inner and outer layers of containment enclosing the waste;

(E) Has a leak detection system built into each containment layer;

(F) The owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods; and

(G) To a reasonable degree of certainty, will not allow dangerous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period.

(iii) The department finds, pursuant to WAC 173-303-655 (8)(d), that the treatment zone of a land treatment unit does not contain levels of dangerous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of WAC 173-303-655(6) has not shown a statistically significant increase in dangerous constituents below the treatment zone during the operating life of the unit. An exemption under this subsection can only relieve an owner or operator of responsibility to meet the requirements of this section during the post-closure care period; or

(iv) The department finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the postclosure 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 postclosure 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).

(2) Required programs.

(a) Owners and operators subject to this section must conduct a monitoring and response program as follows:

(i) Whenever dangerous constituents under subsection (4) of this section, from a regulated unit are detected at the compliance point under subsection (6) of this section, the owner or operator must institute a compliance monitoring program under subsection (10) of this section. Detected is defined as statistically significant evidence of contamination as described in subsection (9)(f) of this section;

(ii) Whenever the ground water protection standard under subsection (3) of this section, is exceeded, the owner or operator must institute a corrective action program under subsection (11) of this section. Exceeded is defined as statistically significant evidence of increased contamination as described in subsection (10)(h) of this section. Exceeded is defined as statistically significant evidence of contamination as described in WAC 173-303-645 (10)(d);

(iii) Whenever dangerous constituents under subsection (4) of this section, from a regulated unit exceed concentration limits under subsection (5) of this section, in ground water between the compliance point under subsection (6) of this section and the downgradient facility property boundary, the owner or operator must institute a corrective action program under subsection (11) of this section; and

(iv) In all other cases, the owner or operator must institute a detection monitoring program under subsection (9) of this section.

(b) The department will specify in the facility permit the specific elements of the monitoring and response program. The department may include one or more of the programs identified in (a) of this subsection, in the facility permit as may be necessary to protect human health and the environment and will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the department will consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

(3) Ground water protection standard. The owner or operator must comply with conditions specified in the facility permit that are designed to ensure that dangerous constituents under subsection (4) of this section, detected in the ground water from a regulated unit do not exceed the concentration limits under subsection (5) of this section, in the uppermost aquifer underlying the waste management area beyond the point of compliance under subsection (6) of this section, during the compliance period under subsection (7) of this section. To the extent practical, the department will establish this ground water protection standard in the facility permit at the time the permit is issued. If the department determines that an established standard is not protective enough, or if the department decides that it is not practical to establish standards at the time of permit issuance, the department will establish the 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 ground water protection standard of subsection (3) of this section, applies. Dangerous constituents are constituents identified in 40 CFR Part 264 Appendix IX, which is adopted by reference (this list is available from the department), and any other constituents not listed there which have caused a waste to be regulated under this chapter, that may be or have been detected in ground water in the uppermost aquifer underlying a regulated unit and that are reasonably expected to be in or derived from waste contained in a regulated unit, unless the department has excluded them under (b) of this subsection.

The department may also specify in the permit indicator parameters (e.g., specific conductance, pH, total organic carbon (TOC), total organic halogen (TOX), or heavy metals), waste constituents or reaction products as identified in the detection monitoring program under subsection (9)(a) of this section, that provide a reliable indication of the presence of dangerous constituents in the ground water.

(b) The department will exclude a 40 CFR Part 264 Appendix IX, or other identified constituent from the list of dangerous constituents specified in the facility permit if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the department will consider the following:

(i) Potential adverse effects on ground water quality, considering:

(A) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity of ground water and the direction of ground water flow;

(D) The proximity and withdrawal rates of ground water users;

(E) The current and future uses of ground water in the area;

(F) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality;

(G) The potential for health risks caused by human exposure to waste constituents;

(H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(I) The persistence and permanence of the potential adverse effects;

(ii) Potential adverse effects on hydraulically-connected surface water quality, considering:

(A) The volume and physical and chemical characteristics of the waste in the regulated unit;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity and quality of ground water, and the direction of ground water flow;

(D) The patterns of rainfall in the region;

(E) The proximity of the regulated unit to surface waters;

(F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(G) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

(H) The potential for health risks caused by human exposure to waste constituents;

(I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(J) The persistence and permanence of the potential adverse effects; and

(iii) Any identification of underground sources of drinking water and exempted aquifers made pursuant to chapter 90.48 RCW, chapter 270, Laws of 1983, and other applicable state laws and regulations.

(5) Concentration limits.

(a) The department will specify in the facility permit concentration limits in the ground water for dangerous constituents established under subsection (4) of this section. The concentration of a dangerous constituent:

(i) Must not exceed the background level of that constituent in the ground water at the time that limit is specified in the permit; or

(ii) For any of the constituents listed in Table 1 of this subsection, must not exceed the respective value given in that table if the background level of the constituent is below the value given in Table 1; or

(iii) Must not exceed an alternate limit established by the department under (b) of this subsection.

Table 1.
Maximum Concentration of Constituents
for Ground Water Protection

Constituent	Maximum Concentration[1]
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin	0.0002
Lindane	0.004
Methoxychlor	0.1
Toxaphene	0.005
2,4-D	0.1m
2,4,5-TP Silvex	0.01

[1] Milligrams per liter.

(b) The department will establish an alternate concentration limit for a dangerous constituent if it finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In establishing alternate concentration limits, the department will consider the same factors listed in subsection (4)(b)(i) through (iii) of this section.

(6) Point of compliance.

(a) The department will specify in the facility permit the point of compliance at which the ground water protection standard of subsection (3) of this section, applies and at which monitoring must be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units. Alternatively, the point of compliance may be any closer points identified by the department at the time the permit is issued, considering the risks of the facility, the wastes and constituents managed there, the potential for waste constituents to have already migrated past the alternate compliance point, and the potential threats to ground and surface waters.

(b) The waste management area is the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit. The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit. If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

(7) Compliance period.

(a) The department will specify in the facility permit the compliance period during which the ground water protection standard of subsection (3) of this section applies. The compliance period is the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period).

(b) The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of subsection (10) of this section.

(c) If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in (a) of this subsection, the compliance period is extended until the owner or operator can demonstrate that the ground water protection standard of subsection (3) of this section,

has not been exceeded for a period of three consecutive years.

(8) General ground water monitoring requirements.

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

(a) The ground water monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer that:

(i) Represent the quality of background water that has not been affected by leakage from a regulated unit;

(A) A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

(I) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and

(II) Sampling at other wells will provide an indication of background ground water quality that is representative or more representative than that provided by the upgradient wells; and

(ii) Represent the quality of ground water passing the point of compliance.

(iii) Allow for the detection of contamination when dangerous waste or dangerous constituents have migrated from the waste management area to the uppermost aquifer.

(b) If a facility contains more than one regulated unit, separate ground water monitoring systems are not required for each regulated unit, provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point of dangerous constituents from the regulated units that have entered the ground water in the uppermost aquifer.

(c) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must allow collection of representative ground water samples. Wells must be constructed in such a manner as to prevent contamination of the samples, the sampled strata, and between aquifers and water bearing strata. Wells must meet the requirements set forth in Parts 1 and 3 of chapter 173-160 WAC, "Minimum standards for construction and maintenance of wells."

(d) The ground water monitoring program must include at a minimum, procedures and techniques for:

(i) Decontamination of drilling and sampling equipment;

(ii) Sample collection;

(iii) Sample preservation and shipment;

(iv) Analytical procedures and quality assurance; and

(v) Chain of custody control.

(e) The ground water monitoring program must include consistent sampling and analytical methods that ensure reliable ground water sampling, accurately measure dangerous constituents and indicator parameters in ground water samples, and provide a reliable indication of groundwater quality below the waste management area.

(f) The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

(g) In detection monitoring or where appropriate in compliance monitoring, data on each dangerous constituent specified in the permit will be collected from background wells and wells at the compliance point(s). The number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size must be as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected. The owner or operator will determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit which will be specified in the unit permit upon approval by the department. This sampling procedure will be:

(i) A sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity and hydraulic gradient, and the fate and transport characteristics of the potential contaminants; or

(ii) An alternate sampling procedure proposed by the owner or operator and approved by the department.

(h) The owner or operator will specify one of the following statistical methods to be used in evaluating ground water monitoring data for each hazardous constituent which, upon approval by the department, will be specified in the unit permit. The statistical test chosen must be conducted separately for each dangerous constituent in each well. Where practical quantification limits (pql's) are used in any of the following statistical procedures to comply with (i)(v) of this subsection, the pql must be proposed by the owner or operator and approved by the department. Use of any of the following statistical methods must be protective of human health and the environment and must comply with the performance standards outlined in (i) of this subsection.

(i) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

(ii) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

(iii) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(iv) A control chart approach that gives control limits for each constituent.

(v) Another statistical test method submitted by the owner or operator and approved by the department.

(i) Any statistical method chosen under (h) of this subsection for specification in the unit permit must comply with the following performance standards, as appropriate:

(i) The statistical method used to evaluate ground water monitoring data must be appropriate for the distribution of chemical parameters or dangerous constituents. If the distribution of the chemical parameters or dangerous constituents is shown by the owner or operator to be inappropriate

for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.

(ii) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground water protection standard, the test must be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experiment wise error rate for each testing period must be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(iii) If a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values must be proposed by the owner or operator and approved by the department if it finds it to be protective of human health and the environment.

(iv) If a tolerance interval or a prediction interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, must be proposed by the owner or operator and approved by the department if it finds these parameters to be protective of human health and the environment. These parameters will be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(v) The statistical method must account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantification limit (pql) approved by the department under (h) of this subsection that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

(vi) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(j) Ground water monitoring data collected in accordance with (g) of this subsection including actual levels of constituents must be maintained in the facility operating record. The department will specify in the permit when the data must be submitted for review.

(9) Detection monitoring program. An owner or operator required to establish a detection monitoring program under this subsection must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor for indicator parameters (e.g., pH, specific conductance, total organic carbon (TOC), total organic halogen (TOX), or heavy metals), waste constituents, or reaction products that provide a reliable indication of the presence of dangerous constituents in ground water. The department will specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:

(i) The types, quantities, and concentrations of constituents in wastes managed at the regulated unit;

(ii) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;

(iii) The detectability of indicator parameters, waste constituents, and reaction products in ground water; and

(iv) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the ground water background.

(b) The owner or operator must install a ground water monitoring system at the compliance point, as specified under subsection (6) of this section. The ground water monitoring system must comply with subsection (8)(a)(ii), (b), and (c) of this section.

(c) The owner or operator must conduct a ground water monitoring program for each chemical parameter and dangerous constituent specified in the permit pursuant to (a) of this subsection in accordance with subsection (8)(g) of this section. The owner or operator must maintain a record of ground water analytical data as measured and in a form necessary for the determination of statistical significance under subsection (8)(h) of this section.

(d) The department will specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or dangerous constituent specified in the permit under (a) of this subsection in accordance with subsection (8)(g) of this section. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semiannually during detection monitoring.

(e) The owner or operator must determine the ground water flow rate and direction in the uppermost aquifer at least annually.

(f) The owner or operator must determine whether there is statistically significant evidence of contamination for any chemical parameter of dangerous constituent specified in the permit pursuant to (a) of this subsection at a frequency specified under (d) of this subsection.

(i) In determining whether statistically significant evidence of contamination exists, the owner or operator must use the method(s) specified in the permit under subsection (8)(h) of this section. These method(s) must compare data collected at the compliance point(s) to the background ground water quality data.

(ii) The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well as the compliance point within a reasonable period of time after completion of sampling. The department will specify in the facility permit what period of time is reasonable after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.

(g) If the owner or operator determines pursuant to (f) of this subsection that there is statistically significant evidence of contamination for chemical parameters or dangerous constituents specified pursuant to (a) of this subsection at any monitoring well at the compliance point, he or she must:

(i) Notify the department of this finding in writing within seven days. The notification must indicate what chemical parameters or dangerous constituents have shown statistically significant evidence of contamination:

(ii) Immediately sample the ground water in all monitoring wells and determine whether constituents in the list of Appendix IX of 40 CFR Part 264 (which is adopted by reference) are present, and if so, in what concentration.

(iii) For any Appendix IX compounds found in the analysis pursuant to (g)(ii) of this subsection, the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample for the compounds found pursuant to (g)(ii) of this subsection, the dangerous constituents found during this initial Appendix IX analysis will form the basis for compliance monitoring.

(iv) Within ninety days, submit to the department an application for a permit modification to establish a compliance monitoring program meeting the requirements of subsection (10) of this section. The application must include the following information:

(A) An identification of the concentration or any Appendix IX constituent detected in the ground water at each monitoring well at the compliance point;

(B) Any proposed changes to the ground water monitoring system at the facility necessary to meet the requirements of subsection (10) of this section;

(C) Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of subsection (10) of this section;

(D) For each dangerous constituent detected at the compliance point, a proposed concentration limit under subsection (5)(a)(i) or (ii) of this section, or a notice of intent to seek an alternate concentration limit under subsection (5)(b) of this section; and

(v) Within one hundred eighty days, submit to the department:

(A) All data necessary to justify an alternate concentration limit sought under subsection (5)(b) of this section; and

(B) An engineering feasibility plan for a corrective action program necessary to meet the requirement of subsection (11) of this section unless:

(I) All dangerous constituents identified under (g)(ii) of this subsection are listed in Table I of subsection (5) of this section and their concentrations do not exceed the respective values given in that Table; or

(II) The owner or operator has sought an alternate concentration limit under subsection (5)(b) of this section for every dangerous constituent identified under (g)(ii) of this subsection.

(vi) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant difference for chemical parameters or dangerous constituents specified pursuant to (a) of this subsection at any monitoring well at the compliance point, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. The owner operator may make a 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 ground water to determine whether regulated units are in compliance with the ground water protection standard under subsection (3) of this section. The department will specify the ground water protection standard in the facility permit, including:

(i) A list of the dangerous constituents and parameters identified under subsection (4) of this section;

(ii) Concentration limits under subsection (5) of this section for each of those dangerous constituents and parameters;

(iii) The compliance point under subsection (6) of this section; and

(iv) The compliance period under subsection (7) of this section.

(b) The owner or operator must install a ground water monitoring system at the compliance point as specified under subsection (6) of this section. The ground water monitoring system must comply with subsection (8)(a)(ii), (b), and (c) of this section.

(c) The department will specify the sampling procedures and statistical methods appropriate for the constituents and the facility, consistent with subsection (8)(g) and (h) of this section.

(i) The owner or operator must conduct a sampling program for each chemical parameter or dangerous constituent in accordance with subsection (8) (g) of this section.

(ii) The owner or operator must record ground water analytical data as measured and in form necessary for the determination of statistical significance under subsection

(8)(h) of this section for the compliance period of the facility.

(d) The owner or operator must determine whether there is statistically significant evidence of increased contamination for any chemical parameter or dangerous constituent specified in the permit, pursuant to (a) of this subsection, at a frequency specified under (f) of this subsection.

(i) In determining whether statistically significant evidence of increased contamination exists, the owner or operator must use the method(s) specified in the permit under subsection (8)(h) of this section. The method(s) must compare data collected at the compliance point(s) to a concentration limit developed in accordance with subsection (5) of this section.

(ii) The owner or operator must determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The department will specify that time period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.

(e) The owner or operator must determine the rate and direction of ground water flow in the uppermost aquifer at least annually.

(f) The department will specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with subsection (8)(g) of this section. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semiannually during the compliance period of the facility.

(g) The owner or operator must analyze samples from all monitoring wells at the compliance point for all constituents contained in Appendix IX of Part 264 at least annually to determine whether additional dangerous constituents are present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in (f) of this subsection. If the owner or operator finds Appendix IX constituents in the ground water that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month and repeat the Appendix IX analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentration of these additional constituents to the department within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then he or she must report the concentrations of these additional constituents to the department within seven days after completion of the initial analysis and add them to the monitoring list. If the owner or operator determines, pursuant to (d) of this subsection, that any concentration limits under subsection (5) of this section are being exceeded at any monitoring well at the point of compliance, he must:

(i) Notify the department of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded;

(ii) Submit to the department an application for a permit modification to establish a corrective action program meeting the requirements of subsection (11) of this section, within ninety days, or within sixty days if an engineering feasibility study has been previously submitted to the department under subsection (9)(h)(v) of this section. For regulated units managing EHW, time frames of sixty days and forty-five days, respectively will apply. However, if the department finds that the full extent of the ninety/sixty-day or the sixty/forty-five-day time periods will increase the likelihood to cause a threat to public health, or the environment, it can at its discretion reduce their duration. In specifying shorter limits, the department will consider the following factors:

(A) The physical and chemical characteristics of the dangerous constituents and parameters in the ground water;

(B) The hydrogeological characteristics of the facility and of the surrounding land;

(C) The rate of movement and direction of flow of the affected ground water;

(D) The proximity to and withdrawal rates of ground water users downgradient; and

(E) The current and future uses of ground water in the concerned area; and

(iii) The application must at a minimum include the following information:

(A) A detailed description of corrective actions that will achieve compliance with the ground water protection standard specified in the permit; and

(B) A plan for a ground water monitoring program that will demonstrate the effectiveness of the corrective action.

(i) If the owner or operator determines, pursuant to (d) of this subsection, that the ground water concentration limits under this section are being exceeded at any monitoring well at the point of compliance, he may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. In making a demonstration under this subsection, the owner or operator must:

(i) Notify the department in writing within seven days that he intends to make a demonstration under this subsection;

(ii) Within forty-five days, submit a report to the department which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;

(iii) Within forty-five days, submit to the department an application for a permit modification to make appropriate changes to the compliance monitoring program at the facility; and

(iv) Continue to monitor in accord with the compliance monitoring program established under this section.

(j) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this section, he must, within forty-five days, submit an application for a permit modification to make any appropriate changes to the program.

(11) Corrective action program. An owner or operator required to establish a corrective action program under this section must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must take corrective action to ensure that regulated units are in compliance with the ground

water protection standard under subsection (3) of this section. The department will specify the ground water protection standard in the facility permit, including:

(i) A list of the dangerous constituents and parameters identified under subsection (4) of this section;

(ii) Concentration limits under subsection (5) of this section, for each of those dangerous constituents and parameters;

(iii) The compliance point under subsection (6) of this section; and

(iv) The compliance period under subsection (7) of this section.

(b) The owner or operator must implement a corrective action program that prevents dangerous constituents and parameters from exceeding their respective concentration limits at the compliance point by removing the dangerous waste constituents and parameters or treating them in place. The permit will specify the specific measures that will be taken.

(c) The owner or operator must begin corrective action within a reasonable time period after the ground water protection standard is exceeded. The department will specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action will begin and such a requirement will operate in lieu of subsection (10)(i)(ii) of this section.

(d) In conjunction with a corrective action program, the owner or operator must establish and implement a ground water monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under subsection (10) of this section, and must be as effective as that program in determining compliance with the ground water protection standard under subsection (3) of this section, and in determining the success of a corrective action program under (e) of this subsection, where appropriate.

(e) In addition to the other requirements of this section, the owner or operator must conduct a corrective action program to remove or treat in place any dangerous constituents or parameters under subsection (4) of this section, that exceed concentration limits under subsection (5) of this section, in ground water between the compliance point under subsection (6) of this section, and the downgradient facility property boundary; and beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the department that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. For a facility seeking or required to have a permit, the corrective action measures to be taken must be specified in the permit.

(i) Corrective action measures under this subsection must be initiated at the effective date of the modified permit and completed without time delays considering the extent of contamination.

(ii) Corrective action measures under this subsection may be terminated once the concentration of dangerous constituents and parameters under subsection (4) of this section, is reduced to levels below their respective concentration limits under subsection (5) of this section.

(f) The owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the ground water protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, he must continue that corrective action for as long as necessary to achieve compliance with the ground water protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if he can demonstrate, based on data from the ground water monitoring program under (d) of this subsection, that the ground water protection standard of subsection (3) of this section, has not been exceeded for a period of three consecutive years.

(g) The owner or operator must report in writing to the department on the effectiveness of the corrective action program. The owner or operator must submit these reports semiannually.

(h) If the owner or operator determines that the corrective action program no longer satisfies the requirements of this section, he must, within forty-five days, submit an application for a permit modification to make any appropriate changes to the program.

(12) Use of the Model Toxics Control Act.

(a) The department may require the owner/operator of a facility to fulfill his corrective action responsibilities under WAC 173-303-645 using an enforceable action issued pursuant to the Model Toxics Control Act, as amended, (chapter 70.105D RCW) and its implementing regulations.

(b) Corrective action requirements imposed by an action issued pursuant to the Model Toxics Control Act will be in compliance with the requirements of WAC 173-303-645 and the requirements of chapter 173-303 WAC to the extent required by RCW 70.105D.030 (2)(d) and WAC 173-340-710.

(c) In the case of facilities seeking or required to have a permit under the provisions of this chapter the department will incorporate corrective action requirements imposed pursuant to the Model Toxics Control Act into permits at the time of permit issuance. Such incorporation will in no way affect the timing or scope of review of the Model Toxics Control Act action.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-645, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-645, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-645, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-645, filed 1/4/89; 84-09-088 (Order DE 83-36), § 173-303-645, filed 4/18/84.]

WAC 173-303-646 Corrective action. (1) Purpose and applicability.

(a) The provisions of this section establish requirements for corrective action for releases of dangerous wastes and

dangerous constituents including releases from solid waste management units.

(b) The provisions of this section apply to facilities seeking or required to have a permit to treat, store, recycle or dispose of dangerous waste.

(c) For the purposes of this section, dangerous constituent means any constituent identified in WAC 173-303-9905 or 40 CFR Part 264 appendix IX, any constituent which caused a waste to be listed or designated as dangerous under the provisions of chapter 173-303 WAC, and any constituent defined as a hazardous substance at RCW 70.105D.020(5).

(2) Requirements.

(a) The owner or operator of a facility must institute corrective action as necessary to protect human health and the environment for all releases of dangerous wastes and dangerous constituents, including releases from all solid waste management units at the facility. Corrective action is required regardless of the time at which waste was managed at the facility or placed in such units and regardless of whether such facilities or units were intended for the management of solid or dangerous waste. Assurances of financial responsibility for such corrective action must be provided.

(b) The owner/operator must implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment. Additionally, as necessary to protect human health and the environment, the department may require the owner/operator to implement on site measures to address releases which have migrated beyond the facility boundary. Assurances of financial responsibility for such corrective action must be provided.

(c) In the case of a facility seeking or required to have a permit under the provisions of chapter 173-303 WAC, corrective action must be specified in the permit. The permit will contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completion of such corrective action.

(3) Use of the Model Toxics Control Act.

(a) The department may require the owner/operator of a facility to fulfill his corrective action responsibilities under subsection (2) of this section using an enforceable action issued pursuant to the Model Toxics Control Act, as amended, (chapter 70.105D RCW) and its implementing regulations.

(b) Corrective action requirements imposed by the department in an action issued pursuant to the Model Toxics Control Act will be in compliance with the requirements of subsection (2) of this section and the requirements of chapter 173-303 WAC to the extent required by RCW 70.105D.030 (2)(d) and WAC 173-340-710.

(c) In the case of facilities seeking or required to have a permit under the provisions of this chapter the department will incorporate corrective action requirements imposed pursuant to the Model Toxics Control Act into permits at the time of permit issuance. Such incorporation will in no way affect the timing or scope of review of the Model Toxics Control Act action.

(4) Corrective action management unit (CAMU).

(a) For the purpose of implementing corrective actions required by subsection (2) of this section, the director may choose to designate an area at a facility as a corrective action management unit. Designation of a CAMU will be in accordance with the provisions of this subsection and subsections (5) and (6) of this section. The director may choose to designate one or more CAMUs at a facility.

(b) Placement of remediation wastes, as defined in WAC 173-303-040 into or within a CAMU does not constitute land disposal of dangerous waste, however, when necessary to protect human health and the environment, the department may require remediation waste meet land disposal standards before placement in a CAMU.

(c) Consolidation or placement of remediation wastes, as defined in WAC 173-303-040 into or within a CAMU does not constitute creation of a unit subject to the minimum technology requirements of WAC 173-303-140(2), however, when necessary to protect human health and the environment, the department may require a CAMU meet all or part of the minimum technology requirements.

(d) 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.

(e) Designation of a CAMU will not in any way affect the timing or scope of review of any actions taken under the Model Toxics Control Act pursuant to subsection (3) of this section to fulfill the corrective action requirements of subsection (2) of this section or the corrective action requirements of WAC 173-303-645.

(5) Designation of a corrective action management unit.

(a) When designating a CAMU, the director will do so in accordance with subsection (4) of this section, and the following:

(i) The CAMU will facilitate the implementation of reliable, effective, protective, and cost-effective remedies;

(ii) Waste management activities associated with the CAMU will not create unacceptable risks to humans or the environment resulting from exposure to dangerous wastes or dangerous constituents;

(iii) The CAMU will include uncontaminated areas of the facility only if including such areas for the purposes of managing remediation wastes is more protective than management of such wastes at contaminated areas of the facility;

(iv) Areas within the CAMU where wastes remain in place after closure of the CAMU, will be managed and contained so as to minimize future releases of dangerous wastes and dangerous constituents to the extent practicable;

(v) When appropriate and practicable, the CAMU will expedite the timing of remedial activity implementation;

(vi) The CAMU will enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and

(vii) The CAMU will, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

(b) When designating a CAMU, the director will specify requirements for the CAMU including the following:

(i) The areal configuration of the CAMU;

(ii) Requirements for remediation waste management within the CAMU including specification of applicable design, operation, and closure requirements;

(iii) Requirements for ground water and/or vadose zone monitoring that are sufficient to:

(A) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of dangerous waste and dangerous constituents in ground water from sources located within the CAMU; and

(B) Detect and subsequently characterize releases of dangerous waste and dangerous constituents to ground water that may occur from areas of the CAMU in which wastes will remain in place after CAMU closure.

(iv) Requirements for closure that will minimize the need for further maintenance of the CAMU and will include, as appropriate and deemed necessary by the director, the following:

(A) Requirements for excavation, removal, treatment, and/or containment of wastes;

(B) For areas in which wastes will remain after closure of the CAMU, requirements for capping of such areas; and

(C) Requirements for removal and decontamination of equipment, devices, and structures used in remediation waste management activities within the CAMU.

(c) In establishing closure requirements for CAMUs under (b)(iv) of this subsection the director will consider the following factors:

(i) CAMU characteristics;

(ii) Volume of wastes which will remain in place after CAMU closure;

(iii) Potential for releases from the CAMU;

(iv) Physical and chemical characteristics of the waste;

(v) Hydrological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases in and/or from the CAMU; and

(vi) Potential for exposure of humans and environmental receptors if releases were to occur at or from the CAMU.

(d) The director will, for areas of the CAMU in which wastes will remain in place after CAMU closure, specify post-closure requirements to control, minimize, or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, and dangerous waste decomposition products to the ground, to ground waters, to surface waters, and to the atmosphere. Such post-closure requirements will include, as necessary to protect human health and the environment, monitoring and maintenance activities and the frequency with which such activities will be performed to ensure the integrity of any cap, final cover, or other containment system.

(e) The owner/operator of a facility must provide sufficient information to enable the director to designate a CAMU in accordance with the criteria in subsections (4), (5)(a) through (d), and (6) of this section.

(f) The director will document the rationale for designating CAMUs and will make such documentation available to the public.

(g) Incorporation of the designation of and requirements for a CAMU into a existing permit must be approved by the director according to the procedures for agency initiated permit modifications under WAC 173-303-830(3), or according to the permit modification procedures of WAC 173-303-830(4).

(6) Incorporation of a regulated unit within a CAMU.

(a) The director may designate a regulated unit (as defined in WAC 173-303-040) as a CAMU, or may incorporate a regulated unit into a CAMU, if:

(i) The regulated unit is closed or closing, meaning it has begun the closure process under WAC 173-303-610 or 173-303-400; and

(ii) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions at the facility.

(b) The requirements of WAC 173-303-610, 173-303-620, 173-303-645, and the unit specific requirements of WAC 173-303-650 through 173-303-680 that applied to the regulated unit will continue to apply to the portion of the CAMU into which the regulated unit was incorporated.

(7) Temporary units (TUs)

(a) For temporary tanks and container storage areas used for treatment or storage of remediation wastes during implementation of the corrective action requirements of subsection (2) of this section, the director may determine that a design, operating, or closure standard applicable to such units may be replaced by alternative requirements which are protective of human health and the environment.

(b) Any temporary unit to which alternative requirements are applied in accordance with (a) of this subsection will be:

(i) Located within the facility boundary; and

(ii) Used only for treatment or storage of remediation wastes managed pursuant to implementation of the corrective action requirements of subsection (2) of this section at the facility.

(c) In establishing standards to be applied to a temporary unit, the director will consider the following factors:

(i) Length of time unit will be in operation;

(ii) Type of unit;

(iii) Volumes of wastes to be managed;

(iv) Physical and chemical characteristics of the wastes to be managed in the unit;

(v) Potential for releases from the unit;

(vi) Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases; and

(vii) Potential for exposure of humans and environmental receptors if releases were to occur from the unit.

(d) The director will specify the length of time, not to exceed one year, a temporary unit will be allowed to operate. The director will also specify design, operating, and closure requirements for the temporary unit.

(e) The director may extend the operating period of a temporary unit for up to one additional year, provided the director determines that:

(i) Continued operation of the unit will not pose a threat to human health and the environment; and

(ii) Continued operation of the unit is necessary to ensure timely and efficient implementation of remedial actions at the facility.

(f) Incorporation of the designation of and requirements for a temporary unit or a time extension for a temporary unit into an existing permit will be:

(i) Approved in accordance with the procedures for agency-initiated permit modifications under WAC 173-303-830(3); or

(ii) Requested by the owner or operator as a Class II modification according to the procedures under WAC 173-303-830(4).

(g) The director will document the rationale for designating a temporary unit and for granting time extensions for temporary units and will make such documentation available to the public.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-646, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-646, filed 12/8/93, effective 1/8/94.]

WAC 173-303-650 Surface impoundments. (1) Applicability. The regulations in this section apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of dangerous waste.

(2) Design and operating requirements.

(a)(i) Any surface impoundment that is not covered by (j) of this subsection must have a liner for all portions of the impoundment (except for an existing portion of a surface impoundment). The liner must be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with subsection (6)(a)(i) of this section. For impoundments that will be closed in accordance with subsection (6)(a)(ii) of this section, the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift;

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(D) For EHW management, the owner or operator must submit an engineering report with their permit application under WAC 173-303-806(4) stating the basis for selecting the liner(s). The report must be certified by an independent, qualified registered professional engineer.

(ii) The owner or operator of a new surface impoundment installed after October 31, 1984, and in which liquid EHW is managed must:

(A) Install a double lined system which incorporates the specifications of subsection (3)(a), (b), and (c) of this section; and

(B) Must comply with either the ground water monitoring requirements of WAC 173-303-645, or the unsaturated zone monitoring requirements of WAC 173-303-655(6).

(b) The owner or operator will be exempted from the requirements of (a) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents listed in WAC 173-303-9905, or which otherwise cause his wastes to be regulated under this chapter, into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.

(d) A surface impoundment must be designed so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.

(e) A surface impoundment must be designed to repel birds.

(f) A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent their failure. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.

(g) Earthen dikes must be kept free of:

(i) Perennial woody plants with root systems which could weaken its structural integrity; and

(ii) Burrowing mammals which could weaken its structural integrity or create leaks through burrows.

(h) Earthen dikes must have a protective cover, such as grass, shale or rock to minimize wind and water erosion and to preserve their structural integrity.

(i) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(j) The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system between such liners. "Construction com-

(f) Incorporation of the designation of and requirements for a temporary unit or a time extension for a temporary unit into an existing permit will be:

(i) Approved in accordance with the procedures for agency-initiated permit modifications under WAC 173-303-830(3); or

(ii) Requested by the owner or operator as a Class II modification according to the procedures under WAC 173-303-830(4).

(g) The director will document the rationale for designating a temporary unit and for granting time extensions for temporary units and will make such documentation available to the public.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-646, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-646, filed 12/8/93, effective 1/8/94.]

WAC 173-303-650 Surface impoundments. (1) Applicability. The regulations in this section apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of dangerous waste.

(2) Design and operating requirements.

(a)(i) Any surface impoundment that is not covered by (j) of this subsection must have a liner for all portions of the impoundment (except for an existing portion of a surface impoundment). The liner must be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with subsection (6)(a)(i) of this section. For impoundments that will be closed in accordance with subsection (6)(a)(ii) of this section, the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift;

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(D) For EHW management, the owner or operator must submit an engineering report with their permit application under WAC 173-303-806(4) stating the basis for selecting the liner(s). The report must be certified by an independent, qualified registered professional engineer.

(ii) The owner or operator of a new surface impoundment installed after October 31, 1984, and in which liquid EHW is managed must:

(A) Install a double lined system which incorporates the specifications of subsection (3)(a), (b), and (c) of this section; and

(B) Must comply with either the ground water monitoring requirements of WAC 173-303-645, or the unsaturated zone monitoring requirements of WAC 173-303-655(6).

(b) The owner or operator will be exempted from the requirements of (a) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents listed in WAC 173-303-9905, or which otherwise cause his wastes to be regulated under this chapter, into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.

(d) A surface impoundment must be designed so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.

(e) A surface impoundment must be designed to repel birds.

(f) A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent their failure. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.

(g) Earthen dikes must be kept free of:

(i) Perennial woody plants with root systems which could weaken its structural integrity; and

(ii) Burrowing mammals which could weaken its structural integrity or create leaks through burrows.

(h) Earthen dikes must have a protective cover, such as grass, shale or rock to minimize wind and water erosion and to preserve their structural integrity.

(i) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(j) The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system between such liners. "Construction com-

mences" is as defined in WAC 173-303-040 under "existing TSD facility."

(i) The liner system must include:

(A) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1 x 10^{-7} cm/sec.

(ii) The liners must comply with (a)(i)(A), (B), and (C) of this subsection.

(iii) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of dangerous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this paragraph are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of one percent or more;

(B) Constructed of granular drainage materials with a hydraulic conductivity of 1 x 10^{-1} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3 x 10^{-4} m^2sec or more;

(C) Constructed of materials that are chemically resistant to the waste managed in the surface impoundment and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes and any waste cover materials or equipment used at the surface impoundment;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(k) The department may approve alternative design or operating practices to those specified in (j) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal system specified in (j) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(l) The double liner requirement set forth in (j) of this subsection may be waived by the department for any monofill, if:

(i) The monofill contains only dangerous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes dangerous for reasons other than the toxicity characteristic in WAC 173-303-090(8) or the toxicity criteria at WAC 173-303-100(5); and

(ii)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of this paragraph, the term "liner" means a liner designed, constructed, installed, and operated to prevent dangerous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent dangerous waste from migrating beyond the liner to adjacent subsurface soil, ground water, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of (j) of this subsection on the basis of a liner designed, constructed, installed, and operated to prevent dangerous waste from passing beyond the liner, at the closure of such impoundment, the owner or operator must remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment will comply with appropriate post-closure requirements, including but not limited to ground water monitoring and corrective action;

(B) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in 40 CFR Section 144.3); and

(C) The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under RCRA section 3005(c); or

(iii) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any dangerous constituent into ground water or surface water at any future time.

(m) The owner or operator of any replacement surface impoundment unit is exempt from (j) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of sections 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Reserve.

(4) Monitoring and inspection.

(a) During construction and installation, liners (except in the case of existing portions of surface impoundments

exempt from subsection (2)(a)(i) of this section) and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a surface impoundment is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of overtopping control systems;

(ii) Sudden drops in the level of the impoundment's contents; and

(iii) Severe erosion or other signs of deterioration in dikes or other containment devices.

(c) Prior to the issuance of a permit, and after any extended period of time (at least six months) during which the impoundment was not in service, the owner or operator must obtain a certification from a qualified engineer that the impoundment's dike, including that portion of any dike which provides freeboard, has structural integrity. The certification must establish, in particular, that the dike:

(i) Will withstand the stress of the pressure exerted by the types and amounts of wastes to be placed in the impoundment; and

(ii) Will not fail due to scouring or piping, without dependence on any liner system included in the surface impoundment construction.

(d)(i) An owner or operator required to have a leak detection system under subsection (2)(j) or (k) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(ii) After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semi annually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semiannual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(iii) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the department based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

(5) Emergency repairs; contingency plans.

(a) A surface impoundment must be removed from service in accordance with (b) of this subsection when:

(i) Unexpected changes of liquid levels occur; or

(ii) The dike leaks.

(b) When a surface impoundment must be removed from service as required by (a) of this subsection, the owner or operator must:

(i) Immediately shut off the flow or stop the addition of wastes into the impoundment;

(ii) Immediately contain any surface leakage which has occurred or is occurring;

(iii) Immediately stop the leak;

(iv) Take any other necessary steps to stop or prevent catastrophic failure;

(v) Empty the impoundment, if a leak cannot be stopped by any other means; and

(vi) Notify the department of the problem in writing within seven days after detecting the problem.

(c) As part of the contingency plan required in WAC 173-303-340 through 173-303-360, the owner or operator must specify:

(i) A procedure for complying with the requirements of (b) of this subsection; and

(ii) A containment system evaluation and repair plan describing: Testing and monitoring techniques; procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure; description of a schedule of actions to be taken in the event of a possible failure; and the repair techniques and materials (and their availability) to be used in the event of leakage due to containment system failure or deterioration which does not require the impoundment to be removed from service.

(d) No surface impoundment that has been removed from service in accordance with the requirements of this section may be restored to service unless the portion of the impoundment which was failing is repaired and the following steps are taken:

(i) If the impoundment was removed from service as the result of actual or imminent dike failure, the dike's structural integrity must be recertified in accordance with subsection (4)(c) of this section;

(ii) If the impoundment was removed from service as the result of a sudden drop in the liquid level, then:

(A) For any existing portion of the impoundment, a liner must be installed in compliance with subsection (2)(a)(i) or (3) of this section; and

(B) For any other portion of the impoundment, the repaired liner system must be certified by a qualified engineer as meeting the design specifications approved in the permit.

(e) A surface impoundment that has been removed from service in accordance with the requirements of this section and that is not being repaired must be closed in accordance with the provisions of subsection (6) of this section.

(6) Closure and post-closure care.

(a) At closure, the owner or operator must:

(i) Remove or decontaminate all dangerous waste and dangerous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with dangerous waste and leachate, and manage them as dangerous waste; or

(ii) If the surface impoundment will be closed as a landfill, except that this option is prohibited if EHW would remain in the closed unit(s):

(A) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;

(B) Stabilize remaining wastes to a bearing capacity sufficient to support a final cover; and

(C) Cover the surface impoundment with a final cover designed and constructed to:

(I) Provide long-term minimization of the migration of liquids through the closed impoundment with a material that has a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present;

(II) Function with minimum maintenance;

(III) Promote drainage and minimize erosion or abrasion of the final cover; and

(IV) Accommodate settling and subsidence so that the cover's integrity is maintained.

(b) If some waste residues or contaminated materials are left in place at final closure (except that no EHW may ever be left in place), the owner or operator must comply with all post-closure requirements contained in WAC 173-303-610 (7), (8), (9), and (10), including maintenance and monitoring throughout the post-closure care period (specified in the permit). The owner or operator must:

(i) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(ii) Maintain and monitor the leak detection system in accordance with subsections (2)(j)(ii)(D) and (E), and (4)(d) of this section, and comply with all other applicable leak detection system requirements of this chapter;

(iii) Maintain and monitor the ground water monitoring system and comply with all applicable requirements of WAC 173-303-645; and

(iv) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

(c)(i) If an owner or operator plans to close a surface impoundment in accordance with (a)(i) of this subsection, and the impoundment does not comply with the liner requirements of subsection (2)(a)(i) of this section, and is not exempt from them in accordance with subsection (2)(b) of this section, then:

(A) The closure plan for the impoundment under WAC 173-303-610(3) must include both a plan for complying with (a)(i) of this subsection, and a contingent plan for complying with (a)(ii) of this subsection in case not all contaminated subsoils can be practicably removed at closure; and

(B) The owner or operator must prepare a contingent post-closure plan under WAC 173-303-610(8) for complying with (b) of this subsection in case not all contaminated subsoils can be practicably removed at closure.

(ii) The cost estimates calculated under WAC 173-303-620 (3) and (5) for closure and post-closure care of an impoundment subject to (c) of this subsection must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under (a)(i) of this subsection.

Reserve.

(7) Special requirements for ignitable or reactive waste. Ignitable or reactive waste must not be placed in a surface impoundment, unless the waste and impoundment satisfy all applicable requirements of WAC 173-303-140 (2)(a), and:

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

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

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

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; or

(c) The surface impoundment is used solely for emergencies.

(8) Special requirements for incompatible wastes. Incompatible wastes and materials must not be placed in the same surface impoundment, unless WAC 173-303-395 (1)(b) is complied with.

(9) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) The wastes F020, F021, F022, F023, F026, or F027 must not be placed in a surface impoundment unless the owner or operator operates the surface impoundment in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this section. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

(10) Action leakage rate.

(a) The department must approve an action leakage rate for surface impoundment units subject to WAC 173-303-650 (2)(j) or (k). The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under

WAC 173-303-650 (4)(d) to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period, and if the unit is closed in accordance with WAC 173-303-650 (6)(b), monthly during the post-closure care period when monthly monitoring is required under WAC 173-303-650 (4)(d).

(11) Response actions.

(a) The owner or operator of surface impoundment units subject to subsection (2)(j) or (k) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(vi) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the department the results of the analyses specified in (b) (iii), (iv), and (v) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b) (iii), (iv), and (v) of this subsection, the owner or operator must:

(i) Assess the source of liquids and amounts of liquids by source;

(ii) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(iv) Document why such assessments are not needed.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-650, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-650, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-650, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-650, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-650, filed 3/11/88; 86-12-057 (Order DE-85-10), § 173-303-650, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-650, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-650, filed 2/10/82.]

WAC 173-303-655 Land treatment. (1) Applicability. The regulations in this subpart apply to owners and operators of facilities that treat or dispose of dangerous waste in land treatment units, except as WAC 173-303-600 provides otherwise.

(2) Treatment program.

(a) An owner or operator subject to this section must establish a land treatment program that is designed to ensure that dangerous constituents placed in or on the treatment zone are degraded, transformed, or immobilized within the treatment zone. The department will specify in the facility permit the elements of the treatment program, including:

(i) The wastes that are capable of being treated at the unit based on a demonstration under subsection (3) of this section;

(ii) Design measures and operating practices necessary to maximize the success of degradation, transformation, and immobilization processes in the treatment zone in accordance with subsection (4)(a) of this section; and

(iii) Unsaturated zone monitoring provisions meeting the requirements of subsection (6) of this section.

(b) The department will specify in the facility permit the dangerous constituents that must be degraded, transformed, or immobilized under this section. Dangerous constituents are constituents identified in WAC 173-303-9905, and any other constituents which, although not listed in WAC 173-303-9905, cause a waste to be regulated under this chapter, that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

(c) The department will specify the vertical and horizontal dimensions of the treatment zone in the facility permit. The treatment zone is the portion of the unsaturated zone below, and including, the land surface in which the owner or operator intends to maintain the conditions necessary for effective degradation, transformation, or immobilization of dangerous constituents. The maximum depth of the treatment zone must be:

(i) No more than 1.5 meters (5 feet) below the initial soil surface; and

(ii) More than 3 meters (10 feet) above the seasonal high water table; except that the owner or operator may demonstrate to the satisfaction of the department that a distance of less than 3 meters will be adequate. In no case will the distance be less than 1 meter.

(3) Treatment demonstration.

(a) For each waste that will be applied to the treatment zone, the owner or operator must demonstrate, prior to application of the waste, that dangerous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone.

(b) In making this demonstration, the owner or operator may use field tests, laboratory analyses, available data, or, in the case of existing units, operating data. If the owner or operator intends to conduct field tests or laboratory analyses in order to make the demonstration required under (a) of this subsection, he must obtain a land treatment demonstration permit under WAC 173-303-808. The department will

specify in this permit the testing, analytical, design, and operating requirements (including the duration of the tests and analyses, and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure, and clean-up activities) necessary to meet the requirements in (c) of this subsection.

(c) Any field test or laboratory analysis conducted in order to make a demonstration under (a) of this subsection must:

(i) Accurately simulate the characteristics and operating conditions for the proposed land treatment unit including:

(A) The characteristics of the waste and of dangerous constituents present;

(B) The climate in the area;

(C) The topography of the surrounding area;

(D) The characteristics and depth of the soil in the treatment zone; and

(E) The operating practices to be used at the unit;

(ii) Be likely to show that dangerous constituents in the waste to be tested will be completely degraded, transformed, or immobilized in the treatment zone of the proposed land treatment unit; and

(iii) Be conducted in a manner that protects human health and the environment considering:

(A) The characteristics of the waste to be tested;

(B) The operating and monitoring measures taken during the course of the test;

(C) The duration of the test;

(D) The volume of waste used in the test; and

(E) In the case of field tests, the potential for migration of dangerous constituents to ground water or surface water.

(4) Design and operating requirements. The department will specify in the facility permit how the owner or operator will design, construct, operate, and maintain the land treatment unit in compliance with this subsection.

(a) The owner or operator must design, construct, operate, and maintain the unit to maximize the degradation, transformation, and immobilization of dangerous constituents in the treatment zone. The owner or operator must design, construct, operate, and maintain the unit in accordance with all design and operating conditions that were used in the treatment demonstration under subsection (3) of this section. At a minimum, the department will specify in the facility permit:

(i) The rate and method of waste application to the treatment zone;

(ii) Measures to control soil pH;

(iii) Measures to enhance microbial or chemical reactions (e.g., fertilization, tilling); and

(iv) Measures to control the moisture content of the treatment zone.

(b) The owner or operator must design, construct, operate, and maintain the treatment zone to minimize run-off of dangerous constituents during the active life of the land treatment unit.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the treatment zone during peak discharge from at least a twenty-five-year storm.

(d) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(e) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain the design capacity of the system.

(f) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator must control wind dispersal.

(g) The owner or operator must inspect the unit weekly and after storms to detect evidence of:

(i) Deterioration, malfunctions, or improper operation of run-on and run-off control systems; and

(ii) Improper functioning of wind dispersal control measures.

(5) Food chain crops. The department may allow the growth of food chain crops in or on the treatment zone only if the owner or operator satisfies the conditions of this subsection. The department will specify in the facility permit the specific food chain crops which may be grown.

(a)(i) The owner or operator must demonstrate that there is no substantial risk to human health caused by the growth of such crops in or on the treatment zone by demonstrating, prior to the planting of such crops, that dangerous constituents other than cadmium:

(A) Will not be transferred to the food or feed portions of the crop by plant uptake or direct contact, and will not otherwise be ingested by food chain animals (e.g., by grazing); or

(B) Will not occur in greater concentrations in or on the food or feed portions of crops grown on the treatment zone than in or on identical portions of the same crops grown on untreated soils under similar conditions in the same region.

(ii) The owner or operator must make the demonstration required under (a)(i) of this subsection prior to the planting of crops at the facility for all dangerous constituents that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

(iii) In making such a demonstration, the owner or operator may use field tests, greenhouse studies, available data, or, in the case of existing units, operating data, and must:

(A) Base the demonstration on conditions similar to those present in the treatment zone, including soil characteristics (e.g., pH, cation exchange capacity), specific wastes, application rates, application methods, and crops to be grown; and

(B) Describe the procedures used in conducting any tests, including the sample selection criteria, sample size, analytical methods, and statistical procedures.

(iv) If the owner or operator intends to conduct field tests or greenhouse studies in order to make the demonstration he must obtain a permit for conducting such activities.

(b) The owner or operator must comply with the following conditions if cadmium is contained in wastes applied to the treatment zone;

(i)(A) The pH of the waste and soil mixture must be 6.5 or greater at the time of each waste application, except for waste containing cadmium at concentrations of 2 mg/kg (dry weight) or less;

(B) The annual application of cadmium from waste must not exceed 0.5 kilograms per hectare (kg/ha) on land used for production of tobacco, leafy vegetables, or root crops grown for human consumption. For other food chain crops, the annual cadmium application rate must not exceed:

Time period	Annual Cd application rate (kilograms per hectare)
Present to June 30, 1984	2.0
July 1, 1984 to Dec. 31, 1986	1.25
Beginning Jan. 1, 1987	0.5

(C) The cumulative application of cadmium from waste must not exceed 5kg/ha if the waste and soil mixture has a pH of less than 6.5; and

(D) If the waste and soil mixture has a pH of 6.5 or greater or is maintained at a pH of 6.5 or greater during crop growth, the cumulative application of cadmium from waste must not exceed: 5 kg/ha if soil cation exchange capacity (CEC) is less than 5 meq/100g; 10 kg/ha if soil CEC is 5-15 meq/100g; and 20 kg/ha if soil CEC is greater than 15 meq/100g; or

(ii)(A) Animal feed must be the only food chain crop produced;

(B) The pH of the waste and soil mixture must be 6.5 or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level must be maintained whenever food chain crops are grown;

(C) There must be an operating plan which demonstrates how the animal feed will be distributed to preclude ingestion by humans. The operating plan must describe the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses; and

(D) Future property owners must be notified by a stipulation in the land record or property deed which states that the property has received waste at high cadmium application rates and that food chain crops must not be grown except in compliance with (b)(ii) of this subsection.

(6) Unsaturated zone monitoring. An owner or operator subject to this section must establish an unsaturated zone monitoring program to discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor the soil and soil-pore liquid to determine whether dangerous constituents migrate out of the treatment zone.

(i) The department will specify the dangerous constituents to be monitored in the facility permit. The dangerous constituents to be monitored are those specified under subsection (2)(b) of this section.

(ii) The department may require monitoring for principal dangerous constituents (PDCs) in lieu of the constituents specified under subsection (2)(b) of this section. PDCs are dangerous constituents contained in the wastes to be applied at the unit that are the most difficult to treat, considering the combined effects of degradation, transformation, and immobilization. The department will establish PDCs if it finds, based on waste analyses, treatment demonstrations, or other data, that effective degradation, transformation, or immobilization of the PDCs will assure treatment at least equivalent levels for the other dangerous constituents in the wastes.

(b) The owner or operator must install an unsaturated zone monitoring system that includes soil monitoring using soil cores and soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system must consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that:

(i) Represent the quality of background soil-pore liquid quality and the chemical make-up of soil that has not been affected by leakage from the treatment zone; and

(ii) Indicate the quality of soil-pore liquid and the chemical make-up of the soil below the treatment zone.

(c) The owner or operator must establish a background value for each dangerous constituent to be monitored under (a) of this subsection. The permit will specify the background values for each constituent or specify the procedures to be used to calculate the background values.

(i) Background soil values may be based on a one-time sampling at a background plot having characteristics similar to those of the treatment zone.

(ii) Background soil-pore liquid values must be based on at least quarterly sampling for one year at a background plot having characteristics similar to those of the treatment zone.

(iii) The owner or operator must express all background values in a form necessary for the determination of statistically significant increases under (f) of this subsection.

(iv) In taking samples used in the determination of all background values, the owner or operator must use an unsaturated zone monitoring system that complies with (b)(i) of this subsection.

(d) The owner or operator must conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The department will specify the frequency and timing of soil and soil-pore liquid monitoring in the facility permit after considering the frequency, timing, and rate of waste application, and the soil permeability. The owner or operator must express the results of soil and soil-pore liquid monitoring in a form necessary for the determination of statistically significant increases under (f) of this subsection.

(e) The owner or operator must use consistent sampling and analysis procedures that are designed to ensure sampling results that provide a reliable indication of soil-pore liquid quality and the chemical make-up of the soil below the treatment zone. At a minimum, the owner or operator must implement procedures and techniques for:

(i) Sample collection;

(ii) Sample preservation and shipment;

(iii) Analytical procedures; and

(iv) Chain of custody control.

(f) The owner or operator must determine whether there is a statistically significant change over background values for any dangerous constituent to be monitored under (a) of this subsection, below the treatment zone each time he conducts soil monitoring and soil-pore liquid monitoring under (d) of this subsection.

(i) In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent, as determined under (d) of this

subsection, to the background value for that constituent according to the statistical procedure specified in the facility permit under this subsection.

(ii) The owner or operator must determine whether there has been a statistically significant increase below the treatment zone within a reasonable time period after completion of sampling. The department will specify that time period in the facility permit after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of soil and soil-pore liquid samples.

(iii) The owner or operator must determine whether there is a statistically significant increase below the treatment zone using a statistical procedure that provides reasonable confidence that migration from the treatment zone will be identified. The department will specify a statistical procedure in the facility permit that it finds:

(A) Is appropriate for the distribution of the data used to establish background values; and

(B) Provides a reasonable balance between the probability of falsely identifying migration from the treatment zone and the probability of failing to identify real migration from the treatment zone.

(g) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant increase of dangerous constituents below the treatment zone, he must:

(i) Notify the department of his finding in writing within seven days. The notification must indicate what constituents have shown statistically significant increases;

(ii) Within forty-five days, submit to the department an application for a permit modification to amend the operating practices at the facility in order to maximize the success of degradation, transformation, or immobilization processes in the treatment zone; and

(iii) Continue to monitor in accordance with the unsaturated zone monitoring program established under this subsection.

(h) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant increase of dangerous constituents below the treatment zone, he may demonstrate that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. While the owner or operator may make a demonstration under this subsection, he is not relieved of the requirement to submit concurrently a permit modification application within the forty-five-day period, unless the demonstration made under this subsection successfully shows that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. In making a demonstration under this subsection, the owner or operator must:

(i) Notify the department in writing within seven days of determining a statistically significant increase below the treatment zone that he intends to make a demonstration under this subsection;

(ii) Within forty-five days, submit a report to the department demonstrating that a source other than the regulated units caused the increase or that the increase resulted from error in sampling, analysis, or evaluation;

(iii) Within forty-five days, submit to the department an application for a permit modification to make any appropriate changes to the unsaturated zone monitoring program at the facility; and

(iv) Continue to monitor in accordance with the unsaturated zone monitoring program established under this subsection.

(7) Recordkeeping. The owner or operator must include dangerous waste application dates and rates in the operating record required under WAC 173-303-380.

(8) Closure and postclosure care.

(a) During the closure period the owner or operator must:

(i) Continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of dangerous constituents within the treatment zone as required under subsection (4)(a) of this section, except to the extent such measures are inconsistent with (a)(viii) of this subsection;

(ii) Continue all operations in the treatment zone to minimize run-off of dangerous constituents as required under subsection (4)(b) of this section;

(iii) Maintain the run-on control system required under subsection (4)(c) of this section;

(iv) Maintain the run-off management system required under subsection (4)(d) of this section;

(v) Control wind dispersal of dangerous waste if required under subsection (4)(f) of this section;

(vi) Continue to comply with any prohibitions or conditions concerning growth of food chain crops under subsection (5) of this section;

(vii) Continue unsaturated zone monitoring in compliance with subsection (6) of this section, except that soil-pore liquid monitoring may be terminated ninety days after the last application of waste to the treatment zone; and

(viii) Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of dangerous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.

(b) For the purpose of complying with WAC 173-303-610(6) when closure is completed, the owner or operator may submit to the department a certification by an independent qualified soil scientist, in lieu of an independent, qualified registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

(c) During the postclosure 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 postclosure care activities;

(ii) Maintain a vegetative cover over closed portions of the facility;

(iii) Maintain the run-on control system required under subsection (4)(c) of this section;

(iv) Maintain the run-off management system required under subsection (4)(d) of this section;

(v) Control wind dispersal of dangerous waste, if required under subsection (4)(f) of this section;

(vi) Continue to comply with any prohibitions or conditions concerning growth of food chain crops under subsection (5) of this section; and

(vii) Continue unsaturated zone monitoring in compliance with subsection (6) of this section, except that soil-pore liquid monitoring may be terminated one hundred eighty days after the last application of waste to the treatment zone.

(d) The owner or operator is not subject to regulation under (a)(viii) and (c) of this subsection, if the department finds that the level of dangerous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in (d)(iii) of this subsection. The owner or operator may submit such a demonstration to the department at any time during the closure or postclosure care periods. For the purposes of this subsection:

(i) The owner or operator must establish background soil values and determine whether there is a statistically significant increase over those values for all dangerous constituents specified in the facility permit under subsection (2)(b) of this section;

(A) Background soil values may be based on a one-time sampling of a background plot having characteristics similar to those of the treatment zone;

(B) The owner or operator must express background values and values for dangerous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under (d)(iii) of this subsection;

(ii) In taking samples used in the determination of background and treatment zone values, the owner or operator must take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical make-up of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively;

(iii) In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator must use a statistical procedure that:

(A) Is appropriate for the distribution of the data used to establish background values; and

(B) Provides a reasonable balance between the probability of falsely identifying dangerous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.

(e) The owner or operator is not subject to regulation under WAC 173-303-645 if the department finds that the owner or operator satisfies (d) of this subsection, and if unsaturated zone monitoring under subsection (6) of this section, indicates that dangerous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

(9) Special requirements for ignitable or reactive waste. The owner or operator must not apply ignitable or reactive waste to the treatment zone unless the waste and the treatment zone meet all applicable requirements of WAC 173-303-140 (2)(a), and:

(a) The waste is immediately incorporated into the soil so that:

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

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

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

(10) Special requirements for incompatible wastes. The owner or operator must not place incompatible wastes, or incompatible wastes and materials, in or on the same treatment zone, unless WAC 173-303-395 (1)(b) is complied with.

(11) Special requirements for extremely hazardous waste. Under no circumstances will EHW be allowed to remain in a closed land treatment unit after concluding the postclosure care period. If EHW remains at the end of the scheduled postclosure care period specified in the permit, then the department will either extend the postclosure care period, or require that all EHW be disposed of off-site or that it be treated. In deciding whether to extend postclosure care or require disposal or treatment, the department will take into account the likelihood that the waste will or will not continue to degrade in the land treatment unit to the extent that it is no longer EHW. For the purposes of this subsection, EHW will be considered to remain in a land treatment unit if representative samples of the treatment zone are designated as EHW. Procedures for representative sampling and testing will be specified in the permit.

(12) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) Dangerous wastes F020, F021, F022, F023, F026, or F027 must not be placed in a land treatment unit unless the owner or operator operates the facility in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection and in accord with all other applicable requirements of this chapter. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary for land treatment facilities managing dangerous wastes F020, F021, F022, F023, F026, or F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-655, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-655, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-

655, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-655, filed 4/18/84.]

WAC 173-303-660 Waste piles. (1) Applicability.

(a) The regulations in this section apply to owners and operators of facilities that store or treat dangerous waste in piles.

(b) The regulations in this section do not apply to owners or operators of waste piles that will be closed with wastes left in place. Such waste piles are subject to regulation under WAC 173-303-665 (Landfills).

(c) The owner or operator of any waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated is not subject to regulation under subsection (2) of this section, or under WAC 173-303-645, provided that:

(i) Liquids or materials containing free liquids are not placed in the pile;

(ii) The pile is protected from surface water run-on by the structure or in some other manner;

(iii) The pile is designed and operated to control dispersal of the waste by wind, by means other than wetting; and

(iv) The pile will not generate leachate through decomposition or other reactions.

(d) Reserve.

(2) Design and operating requirements.

(a) A waste pile (except for an existing portion of a waste pile) must have:

(i) A liner that is designed, constructed, installed and maintained to prevent any migration of wastes out of the pile into the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(ii) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the pile and to the leachate expected to be generated; and

(II) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying wastes, waste cover materials, and by any equipment used at the pile; and

(B) Designed and operated to function without clogging through the scheduled closure of the waste pile.

(b) A liner and leachate collection and removal system must be protected from plant growth which could adversely affect any component of the system.

(c) The owner or operator must submit an engineering report with his permit application stating the basis for selecting the liner required in subsection (2)(a)(i) of this section. The statement must be certified by an independent, qualified registered professional engineer.

(d) The owner or operator will be exempted from the requirements of (a), (b), and (c) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents identified under WAC 173-303-645(4) into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(e) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto any portion of the pile during peak discharge from at least a twenty-five-year storm.

(f) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(g) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain design capacity of the system.

(h) If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.

(i) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(j) The owner or operator of each new waste pile unit on which construction commences after January 29, 1992, each lateral expansion of a waste pile unit on which construction commences after July 29, 1992, and each replacement of an existing waste pile unit that commences reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing facility."

(i) The liner system must include:

(A) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(C) The liners must comply with (a)(i), (A), (B), and (C) of this subsection.

(ii) The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and post-closure care period. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed twelve inches (30.5 cm). The leachate collection and removal system must comply with (j)(iii) (D) and (E) of this subsection.

(iii) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of dangerous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this paragraph are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of one percent or more;

(B) Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more:

(C) Constructed of materials that are chemically resistant to the waste managed in the waste pile and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the waste pile;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(k) The department may approve alternative design or operating practices to those specified in (j) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in (c) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(l) Subitem (j) of this subsection does not apply to monofills that are granted a waiver by the department in accordance with WAC 173-303-650 (2)(l).

(m) The owner or operator of any replacement waste pile unit is exempt from (j) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of section 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Action leakage rate.

(a) The department must approve an action leakage rate for waste piles subject to subsection (2)(j) or (k) of this section. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly flow rate from the monitoring data obtained under subsection (5)(c) of this section to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period.

(4) Response actions.

(a) The owner or operator of waste pile units subject to subsection (2)(j) or (k) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

(vi) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the department the results of the analyses specified in (b) of this subsection and in subsections (3), (4), and (5) of this section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b) (C), (D), and (E) of this subsection, the owner or operator must:

(i)(A) Assess the source of liquids and amounts of liquids by source;

(B) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(ii) Document why such assessments are not needed.

(5) Monitoring and inspection.

(a) During construction or installation, liners (except in the case of existing portions of piles exempt from subsection (2)(a) of this section), and cover systems (e.g., membranes, sheets, coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a waste pile is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;

(ii) Proper functioning of wind dispersal control systems; and

(iii) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

(c) An owner or operator required to have a leak detection system under subsection (2)(j) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(6) Containment system repairs—Contingency plans.

(a) Whenever there is any indication of a possible failure of the containment system, that system must be inspected in accordance with the provisions of the containment system evaluation and repair plan required by (d) of this subsection. Indications of possible failure of the containment system include liquid detected in the leachate detection system, evidence of leakage or the potential for leakage in the base, erosion of the base, or apparent or potential deterioration of the liner(s) based on observation or test samples of the liner materials.

(b) Whenever there is a positive indication of a failure of the containment system, the waste pile must be removed from service. Indications of positive failure of the containment system include waste detected in the leachate detection system, or a breach (e.g., a hole, tear, crack, or separation) in the base.

(c) If the waste pile must be removed from service as required by (b) of this subsection, the owner or operator must:

(i) Immediately stop adding wastes to the pile;

(ii) Immediately contain any leakage which has occurred or is occurring;

(iii) Immediately cause the leak to be stopped; and

(iv) If the leak cannot be stopped by any other means, remove the waste from the base.

(d) As part of the contingency plan required in WAC 173-303-350, the owner or operator must specify:

(i) A procedure for complying with the requirements of (c) of this subsection; and

(ii) A containment system evaluation and repair plan describing: Testing and monitoring techniques; procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure; a schedule of actions to be taken in the event of a possible failure; and a description of the repair techniques and materials (and their availability) to be used in the event of leakage due to containment system failure or deterioration which does not require the waste pile to be removed from service. For EHW piles, the owner or operator must submit with his permit application a statement signed by an independent, qualified registered professional engineer of the basis on which the evaluation and repair plan has been established.

(e) No waste pile that has been removed from service pursuant to (b) of this subsection, may be restored to service unless:

(i) The containment system has been repaired; and

(ii) The containment system has been certified by a qualified engineer as meeting the design specifications approved in the permit.

(f) A waste pile that has been removed from service pursuant to (b) of this subsection, and will not be repaired, must be closed in accordance with subsection (9) of this section.

(7) Special requirements for ignitable or reactive waste. Ignitable or reactive waste must not be placed in a waste

pile, unless the waste and waste pile satisfy all applicable requirements of WAC 173-303-140 (2)(a), and:

(a) Addition of the waste to an existing pile results in the waste or mixture no longer meeting the definition of ignitable or reactive waste under WAC 173-303-090, and complies with WAC 173-303-395 (1)(b); or

(b)(i) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; and

(ii) The generator complies with WAC 173-303-395 (1)(d).

(8) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials must not be placed in the same pile, unless WAC 173-303-395 (1)(b) is complied with.

(b) A pile of dangerous waste that is incompatible with any waste or other material stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device. Piles of incompatible wastes must not be served by the same containment system.

(c) Dangerous waste must not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with WAC 173-303-395 (1)(b).

(9) Closure and postclosure care.

(a) At closure, the owner or operator must remove or decontaminate all dangerous waste, waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them in accordance with this chapter.

(b) If, after removing or decontaminating all residues and making all reasonable efforts regarding removal or decontamination of contaminated components, subsoils, structures, and equipment as required in (a) of this subsection, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated (except that no EHW may ever be left in place), he must close the facility and perform postclosure care in accordance with the closure and postclosure care requirements that apply to landfills, WAC 173-303-665(6).

(c)(i) The owner or operator of a waste pile that does not comply with the liner requirements of subsection (2)(a)(i) of this section, and is not exempt from them in accordance with subsection (1)(c) or (2)(d) of this section, must:

(A) Include in the closure plan for the pile under WAC 173-303-610(3) both a plan for complying with (a) of this subsection, and a contingent plan for complying with (b) of this subsection, in case not all contaminated subsoils can be practicably removed at closure; and

(B) Prepare a contingent postclosure plan under WAC 173-303-610(8) for complying with (b) of this subsection, in case not all contaminated subsoils can be practicably removed at closure.

(ii) The cost estimates calculated under WAC 173-303-620 (3) and (5) for closure and postclosure care of a pile must include the cost of complying with the contingent closure plan and the contingent postclosure plan but are not required to include the cost of expected closure under (a) of this subsection.

(10) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) Dangerous wastes F020, F021, F022, F023, F026, and F027 must not be placed in waste piles that are not enclosed (as defined in subsection (1)(c) of this section) unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this chapter. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary in order to reduce the possibility of migration of these wastes to ground water, to surface water, or air so as to protect human health and the environment.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-660, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-660, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-660, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-660, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-660, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-660, filed 2/10/82.]

WAC 173-303-665 Landfills. (1) Applicability. The regulations in this section apply to owners and operators of facilities that dispose of dangerous waste in landfills, except as WAC 173-303-600 provides otherwise. No landfill will be permitted to dispose of EHW, except for the Hanford facility under WAC 173-303-700.

(2) Design and operating requirements.

(a) Any landfill that is not covered by (h) of this subsection must have a liner system for all portions of the landfill (except for an existing portion of a landfill). The liner system must have:

(i) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or ground water or surface water at anytime during the active life (including the closure period) of the landfill. The liner must be constructed of materials that prevent wastes from passing into the liner during the active life of the facility. The owner or operator must submit an engineering report with his permit application under WAC 173-303-806(4) stating the basis for selecting the liner(s). The report must be certified by a licensed professional engineer. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact

with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(ii) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

(II) Of sufficient strength and thickness to prevent failure under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

(B) Designed and operated to function without clogging through the scheduled closure of the landfill.

(b) The owner or operator will be exempted from the requirements of (a) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternative design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the landfill and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a twenty-five-year storm.

(d) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(e) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain design capacity of the system.

(f) If the landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the landfill to control wind dispersal.

(g) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(h) The owner or operator of each new landfill unit on which construction commences after January 29, 1992, each lateral expansion of a landfill unit on which construction commences after July 29, 1992, and each replacement of an existing landfill unit that commences reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing facility."

(i) The liner system must:

(A) Include a top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) Include a composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(C) The liners must comply with (a)(i)(A), (B), and (C) of this subsection.

(ii) The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and post-closure care period. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed twelve inches (30.5 cm). The leachate collection and removal system must comply with (h)(iii) and (iv) of this subsection.

(iii) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of dangerous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this subsection are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of one percent or more;

(B) Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more;

(C) Constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the landfill;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(j) The department may approve alternative design or operating practices to those specified in (h) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in (c) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(k) The double liner requirement set forth in (h) of this subsection may be waived by the department for any monofill, if:

(i) The monofill contains only dangerous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes dangerous for reasons other than the Toxicity Characteristic in WAC 173-303-090(8), with dangerous waste numbers D004 through D017 or the toxicity criteria at WAC 173-303-100(5); and

(ii)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking;

(B) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in 40 CFR section 144.3); and

(C) The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under RCRA 3005(c); or

(D) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any dangerous constituent into ground water or surface water at any future time.

(l) The owner or operator of any replacement landfill unit is exempt from (h) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of section 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Reserve.

(4) Monitoring and inspection.

(a) During construction or installation, liners (except in the case of existing portions of landfills exempt from subsection (2)(a) of this section), and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a landfill is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;

(ii) Proper functioning of wind dispersal control systems; and

(iii) The presence of leachate in and proper functioning of leachate collection and removal systems.

(c)(i) An owner or operator required to have a leak detection system under subsection (2)(h) or (j) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(ii) After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semiannually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semiannual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(iii) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the department based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

(5) Surveying and recordkeeping. The owner or operator of a landfill must maintain the following items in the operating record required under WAC 173-303-380:

(a) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and

(b) The contents of each cell and the approximate location of each dangerous waste type within each cell.

(6) Closure and postclosure care.

(a) At final closure of the landfill or upon closure of any cell, the owner or operator must cover the landfill or cell with a final cover designed and constructed to:

(i) Provide long-term minimization of migration of liquids through the closed landfill;

(ii) Function with minimum maintenance;

(iii) Promote drainage and minimize erosion or abrasion of the cover;

(iv) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(v) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) After final closure, the owner or operator must comply with all postclosure requirements contained in WAC 173-303-610 (7), (8), (9), and (10) including maintenance and monitoring throughout the postclosure care period. The owner or operator must:

(i) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(ii) Maintain and monitor the leak detection system in accordance with subsections (2)(h) and (4)(c) of this section, where such a system is present between double liner systems;

(iii) Continue to operate the leachate collection and removal system until leachate is no longer detected;

(iv) Maintain and monitor the ground water monitoring system and comply with all other applicable requirements of WAC 173-303-645;

(v) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

(vi) Protect and maintain surveyed benchmarks used in complying with subsection (5) of this section.

(c) Reserve.

(7) Special requirements for incompatible wastes. Incompatible wastes, or incompatible wastes and materials must not be placed in the same landfill cell, unless WAC 173-303-395 (1)(b) is complied with.

(8) Action leakage rate.

(a) The department must approve an action leakage rate for surface impoundment units subject to subsection (2)(h) or (j) of this section. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under subsection (2)(h) of this section, to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period, and monthly during the post-closure care period when monthly monitoring is required under subsection (9) of this section.

(9) Response actions.

(a) The owner or operator of landfill units subject to subsection (2)(h) or (j) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

(vi) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the department the results of the analyses specified in (b)(iii), (iv), and (v) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b)(iii), (iv), and (v) of this subsection, the owner or operator must:

(i) Assess the source of liquids and amounts of liquids by source;

(ii) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(iv) Document why such assessments are not needed.

(10) Special requirements for ignitable or reactive waste.

(a) Except as provided in subsection (8)(b) of this section, and in WAC 173-303-161, ignitable or reactive waste must not be placed in a landfill, unless the waste and landfill meet all applicable requirements for owners and operators of dangerous waste treatment, storage and disposal facilities contained in this chapter, and:

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

(ii) WAC 173-303-395(1) is complied with.

(b) Except for prohibited wastes which remain subject to treatment standards in WAC 173-303-140 (2)(a), ignitable wastes in containers may be landfilled without meeting the requirements of (a) of this subsection, provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes must be disposed of

in nonleaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; must be covered daily with soil or other noncombustible material to minimize the potential for ignition of the wastes; and must not be disposed of in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the waste.

(11) Special requirements for hazardous wastes F020, F021, F022, F023, F026, and F027.

(a) Hazardous wastes F020, F021, F022, F023, F026, and F027 must not be placed in landfills unless the owner or operator operates the landfill in accord with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this section. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through the soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring requirements.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary for landfills managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-665, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-665, filed 1/5/88, effective 2/5/88; 86-12-057 (Order DE-85-10), § 173-303-665, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-665, filed 4/18/84.]

WAC 173-303-670 Incinerators. (1) Applicability.

(a) Except as WAC 173-303-600 provides otherwise, the regulations in this section apply to owners and operators of facilities that incinerate dangerous waste and to owners and operators who burn dangerous waste in boilers or industrial furnaces in order to destroy them, or who burn dangerous waste in boilers or in industrial furnaces for any recycling purpose and elect to be regulated under this section.

(b) The department may, in establishing permit conditions, exempt the facility from all requirements of this section except subsection (2) of this section, waste analysis, and subsection (8) of this section, closure, if the department finds, after an examination of the waste analysis included with Part B of the owner/operator's permit application, that the waste to be burned:

(i)(A) Is either listed as a dangerous waste in WAC 173-303-080 only because it is ignitable or, that the waste is designated only as an ignitable dangerous waste under WAC 173-303-090; or

(B) Is either listed in WAC 173-303-080 or is designated under WAC 173-303-090 solely because it is reactive for the characteristics described in WAC 173-303-090 (7)(a)(i), (ii), (iii), (vi), (vii) and (viii), and will not be burned when other dangerous wastes are present in the combustion zone; and

(ii) Contains none of the dangerous constituents listed in WAC 173-303-9905 above significant concentration limits; and

(iii) Is not designated by the dangerous waste criteria of WAC 173-303-100.

(c) The owner or operator of an incinerator may conduct trial burns, subject only to the requirements of WAC 173-303-807, trial burn permits.

(2) Waste analysis.

(a) As a portion of a trial burn plan required by WAC 173-303-807, or with Part B of his permit application, the owner or operator must have included an analysis of his waste feed sufficient to provide all information required by WAC 173-303-807 or 173-303-806 (3) and (4).

(b) Throughout normal operation the owner or operator must conduct sufficient waste analysis to verify that waste feed to the incinerator is within the physical and chemical composition limits specified in his permit (under subsection (6)(b) of this section).

(3) Designation of principal organic dangerous constituents and dangerous combustion byproducts. Principal organic dangerous constituents (PODCs) and dangerous combustion byproducts must be treated to the extent required by the performance standards specified in subsection (4) of this section. For each waste feed to be burned, one or more PODCs and dangerous combustion byproducts will be specified in the facility's permit from among those constituents listed in WAC 173-303-9905 and, to the extent practical, from among those constituents which contribute to the toxicity, persistence, or carcinogenicity of wastes designated under WAC 173-303-100. This specification will be based on the degree of difficulty of incineration of the organic constituents of the waste feed and its combustion byproducts and their concentration or mass, considering the results of waste analyses and trial burns or alternative data submitted with Part B of the facility's permit application. Organic constituents or byproducts which represent the greatest degree of difficulty of incineration will be those most likely to be designated as PODCs and dangerous combustion byproducts. Constituents are more likely to be designated as PODCs or dangerous combustion byproducts if they are present in large quantities or concentrations. Trial PODCs will be designated for performance of trial burns in accordance with the procedure specified in WAC 173-303-807 for obtaining trial burn permits. Trial dangerous combustion byproducts may be designated under the same procedures.

(4) Performance standards. An incinerator burning dangerous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under subsection (6) of this section, it will meet the following performance standards:

(a)(i) Except as provided in (a)(ii) of this subsection, an incinerator burning dangerous waste must achieve a destruction and removal efficiency (DRE) of 99.99 percent for each PODC designated (under subsection (3) of this section) in its permit for each waste feed. DRE is determined for each PODC from the following equation:

$$DRE = \frac{(W_{in} - W_{out}) \times 100\%}{W_{in}}$$

Where:

W_{in} = Mass feed rate of one PODC in the waste stream feeding the incinerator, and

W_{out} = Mass emission rate of the same PODC present in exhaust emissions prior to release to the atmosphere.

(ii) An incinerator burning dangerous wastes F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic dangerous constituent (PODCs) designated (under subsection (3) of this section) in its permit. This performance must be demonstrated on PODCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each PODCs from the equation in subsection (4)(a)(i) of this section. In addition, the owner or operator of the incinerator must notify the department of his intent to incinerate dangerous wastes F020, F021, F022, F023, F026, or F027.

(b) Incinerators burning dangerous waste must destroy dangerous combustion byproducts designated under subsection (3) of this section so that the total mass emission rate of these byproducts emitted from the stack is no more than .01 percent of the total mass feed rate of PODCs fed into the incinerator.

(c)(i) An incinerator burning dangerous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or one percent of the HCl in the stack gas prior to entering any pollution control equipment.

(ii) An incinerator burning dangerous waste must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the formula:

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

Where Pc is the corrected concentration of particulate matter, Pm is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in 40 CFR Part 60, Appendix A (Method 3). This correction procedure is to be used by all dangerous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the department will select an appropriate correction procedure to be specified in the facility permit.

(d) The emission standards specified in (c) of this subsection must be met when no other more stringent standards exist. Where a state or local air pollution control authority has jurisdiction and has more stringent emission standards, an incinerator burning dangerous wastes must comply with the applicable air pollution control authority's emission standards (including limits based on best available control technology).

(e) For purposes of permit enforcement, compliance with the operating requirements specified in the permit (under subsection (6) of this section), will be regarded as compliance with subsection (4) of this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of subsection (4) of this section, may be evidence justifying modification, revocation, or reissuance of a permit under WAC 173-303-830.

(5) Trial burns and permit modifications.

(a) The owner or operator of a dangerous waste incinerator may burn only wastes specified in his permit and only under operating conditions specified for those wastes under subsection (6) of this section, except:

(i) In approved trial burns under WAC 173-303-807; or

(ii) Under exemptions created by WAC 173-303-670(1).

(b) New dangerous wastes may be burned only after operating conditions have been specified in a trial burn permit or a permit modification has been issued, as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with Part B of a permit application under WAC 173-303-806(4).

(c) The permit for a new dangerous waste incinerator must establish appropriate conditions for each of the applicable requirements of this section, including but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of subsection (6) of this section, sufficient to comply with the following standards:

(i) For the period beginning with initial introduction of dangerous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish operating conditions required in (c)(ii) of this subsection, not to exceed a duration of seven hundred twenty hours operating time for treatment of dangerous waste. The operating requirements must be those most likely to ensure compliance with the performance standards of subsection (4) of this section, based on the department's engineering judgment. The department may extend the duration of this period once for up to seven hundred twenty additional hours when good cause for the extension is demonstrated by the applicant;

(ii) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the performance standards of subsection (4) of this section, and must be in accordance with the approved trial burn plan;

(iii) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the department, the operating requirements must be those most likely to ensure compliance with the performance standards of subsection (4) of this section, based on the department's engineering judgment;

(iv) For the remaining duration of the permit, the operating requirements must be those demonstrated, in a trial burn or by alternative data specified in WAC 173-303-806 (4)(f)(iii)(G), as sufficient to ensure compliance with the performance standards of subsection (4) of this section.

(6) Operating requirements.

(a) An incinerator must be operated in accordance with operating requirements specified in the permit. These will be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in subsection (5)(b) of this section and included with Part B of a facility's permit application) to be sufficient to comply with the performance standards of subsection (4) of this section.

(b) Each set of operating requirements will specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed which will not affect compliance with the performance requirement of subsection (4) of this section) to which the operating requirements apply. For each such waste feed, the permit will specify acceptable operating limits including the following conditions:

(i) Carbon monoxide (CO) level in the stack exhaust gas;

(ii) Waste feed rate;

(iii) Combustion temperature;

(iv) An appropriate indicator of combustion gas velocity;

(v) Allowable variations in incinerator system design or operating procedures; and

(vi) Such other operating requirements as are necessary to ensure that the performance standards of subsection (4) of this section are met.

(c) During startup and shutdown of an incinerator, dangerous waste (except waste exempted in accordance with subsection (1)(b) of this section) must not be fed into the incinerator unless the incinerator is operating within the conditions of operation (temperature, air feed rate, etc.) specified in the permit.

(d) Fugitive emissions from the combustion zone must be controlled by:

(i) Keeping the combustion zone totally sealed against fugitive emissions;

(ii) Maintaining a combustion zone pressure lower than atmospheric pressure; or

(iii) An alternate means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(e) An incinerator must be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under (a) of this subsection.

(f) An incinerator must cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

(7) Monitoring and inspections.

(a) The owner or operator must conduct, as a minimum, the following monitoring while incinerating dangerous waste:

(i) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit must be monitored on a continuous basis;

(ii) Carbon monoxide (CO) must be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere; and

(iii) As required by the department, sampling and analysis of the waste and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the performance standards of subsection (4) of this section.

(b) The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be completely inspected at least daily for leaks, spills, fugitive emissions, and signs of tampering. All emergency waste feed cutoff controls and system alarms must be tested at least weekly to verify proper operation, unless the owner or operator demonstrates to the department that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, emergency cutoff and alarm systems must be tested at least monthly.

(c) This monitoring and inspection data must be recorded and the records must be placed in the operating log required by WAC 173-303-380(1).

(8) Closure. At closure the owner or operator must remove all dangerous waste and dangerous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the incinerator site. Remaining equipment, bases, liners, soil, and debris containing or contaminated with dangerous waste or waste residues must be decontaminated or removed.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-670, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-670, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-670, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-670, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-670, filed 2/10/82.]

WAC 173-303-675 Drip pads. (1) Applicability.

(a) The requirements of this section apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water run-off to an associated collection system. Existing drip pads are those constructed before December 6, 1990, and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads. The requirement in subsection (4)(b)(iii) of this section to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992, except for those constructed after December 24, 1992, for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 24, 1992.

(b) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither run-off nor run-on is generated is not subject to regulation under subsection (3)(e) or (f) of this section, as appropriate.

(c) The requirements of this section are not applicable to the management of infrequent and incidental drippage in storage yards provided that: The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage. At a minimum, the contingency plan must describe how the owner or operator will do the following:

(i) Clean up the drippage;

(ii) Document the cleanup of the drippage;

(iii) Retain documents regarding cleanup for three years; and

(iv) Manage the contaminated media in a manner consistent with federal regulations.

(2) Assessment of existing drip pad integrity.

(a) For each existing drip pad as defined in subsection (1) of this section, the owner or operator must evaluate the drip pad and determine that it meets all of the requirements of this section, except the requirements for liners and leak detection systems of subsection (4)(b) of this section. No later than the effective date of this rule, the owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all of the standards of subsection (4) of this section are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of subsection (4) of this section, except the standards for liners and leak detection systems, specified in subsection (4)(b) of this section.

(b) The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of subsection (4)(b) of this section, and submit the plan to the department no later than two years before the date that all repairs, upgrades, and modifications are complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of subsection (4) of this section. The plan must be reviewed and certified by an independent qualified registered professional engineer.

(c) Upon completion of all upgrades, repairs, and modifications, the owner or operator must submit to the department, the as-built drawings for the drip pad together with a certification by an independent qualified registered professional engineer attesting that the drip pad conforms to the drawings.

(d) If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of subsection (4)(m) of this section or close the drip pad in accordance with subsection (6) of this section.

(3) Design and installation of new drip pads.

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with one of the following:

(a) All of the requirements of subsections (4) of this section (except subsection (4)(a)(iv)), (5) and (6) of this section; or

(b) All of the requirements of subsections (4) of this section (except subsection (4)(b)), (5) and (6) of this section.

(4) Design and operating requirements.

(a) Drip pads must:

(i) Be constructed of nonearthen materials, excluding wood and nonstructurally supported asphalt:

(ii) Be sloped to free-drain treated wood drippage, rain and other waters, or solutions of drippage and water or other wastes to the associated collection system;

(iii) Have a curb or berm around the perimeter;

(iv)(A) Have a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with subsection (3)(a) of this section instead of subsection (3)(b) of this section.

(B) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this subsection, except for (b) of this subsection.

(v) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

Note: The department will generally consider applicable standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) or the American Society of Testing and Materials (ASTM) in judging the structural integrity requirement of this subsection.

(b) If an owner/operator elects to comply with subsection (3)(b) of this section instead of subsection (3)(a) of this section, the drip pad must have:

(i) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or ground water or surface water during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and

(C) Installed to cover all surrounding earth that could come in contact with the waste or leakage; and

(ii) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and

(II) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad;

(B) Designed and operated to function without clogging through the scheduled closure of the drip pad; and

(C) Designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.

(iii) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.

(c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.

Note: See subsection (4)(m) of this section for remedial action required if deterioration or leakage is detected.

(d) The drip pad and associated collection system must be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.

(e) Unless protected by a structure, as described in subsection (1)(b) of this section, the owner or operator must design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a twenty-four-hour, twenty-five-year storm, unless the system has sufficient excess capacity to contain any run-off that might enter the system.

(f) Unless protected by a structure or cover as described in subsection (1)(b) of this section, the owner or operator must design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(g) The drip pad must be evaluated to determine that it meets the requirements of (a) through (f) of this subsection and the owner or operator must obtain a statement from an independent, qualified registered professional engineer certifying that the drip pad design meets the requirements of this section.

(h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.

(i) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log. The owner/operator must determine if the residues are dangerous under WAC 173-303-070 and, if so, must manage them under this chapter.

(j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

(k) After being removed from the treatment vessel, treated wood from pressure and nonpressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the drip pad following treatment in accordance with this requirement.

(l) Collection and holding units associated with run-on and run-off control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

(m) Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

(i) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must:

(A) Enter a record of the discovery in the facility operating log;

(B) Immediately remove the portion of the drip pad affected by the condition from service;

(C) Determine what steps must be taken to repair the drip pad and clean up any leakage from below the drip pad, and establish a schedule for accomplishing the repairs;

(D) Within twenty-four hours after discovery of the condition, notify the department of the condition and, within ten working days, provide written notice to the department with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.

(ii) The department will review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete and notify the owner or operator of the determination and the underlying rationale in writing.

(iii) Upon completing all repairs and clean up, the owner or operator must notify the department in writing and provide a certification signed by an independent, qualified registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with (m)(i)(D) of this subsection.

(n) Should a permit be necessary, the department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

(o) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

(5) Inspections.

(a) During construction or installation, liners and cover systems (e.g., membranes, sheets, or coatings) must be

inspected for uniformity, damage and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners must be inspected and certified as meeting the requirements of subsection (4) of this section by an independent qualified, registered professional engineer. This certification must be maintained at the facility as part of the facility operating record. After installation, liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

(b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions or improper operation of run-on and run-off control systems;

(ii) The presence of leakage in and proper functioning of leak detection system;

(iii) Deterioration or cracking of the drip pad surface.

Note: See subsection (4)(m) of this section for remedial action required if deterioration or leakage is detected.

(6) Closure.

(a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in (a) of this subsection, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with closure and post-closure care requirements that apply to landfills (WAC 173-303-665(6)). For permitted units, the requirement to have a permit continues throughout the post-closure period. In addition, for the purpose of closure, post-closure, and financial responsibility, such a drip pad is then considered to be landfill, and the owner or operator must meet all of the requirements for landfills specified in WAC 173-303-610 and 173-303-620.

(c)(i) The owner or operator of an existing drip pad, as defined in subsection (1) of this section, that does not comply with the liner requirements of subsection (4)(b)(i) of this section must:

(A) Include in the closure plan for the drip pad under WAC 173-303-610(3), both a plan for complying with (a) of this subsection and a contingent plan for complying with (b) of this subsection in case not all contaminated subsoils can be practicably removed at closure; and

(B) Prepare a contingent post-closure plan under WAC 173-303-610(8) for complying with (b) of this subsection in case not all contaminated subsoils can be practicably removed at closure.

(ii) The cost estimates calculated under WAC 173-303-610 and 173-303-620 for closure and post-closure care of a drip pad subject to this subsection must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under (a) of this subsection.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-675, filed 10/19/95, effective 11/19/95.]

WAC 173-303-680 Miscellaneous units. (1) Applicability. The requirements of this section apply to owners and operators of facilities that treat, store, or dispose of dangerous waste in miscellaneous units, except as WAC 173-303-600 provides otherwise.

(2) Environmental performance standards. A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as necessary to protect human health and the environment, including, but not limited to, as appropriate, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of dangerous waste or dangerous constituents from the unit. Permit terms and provisions will include those requirements in WAC 173-303-630 through 173-303-670, WAC 173-303-800 through 173-303-806, and 40 CFR Part 146 that are appropriate for the miscellaneous units being permitted. Protection of human health and the environment includes, but is not limited to:

(a) Prevention of any releases that may have adverse effects on human health or the environment due to migration of wastes constituents in the ground water or subsurface environment, considering:

(i) The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;

(ii) The hydrologic and geologic characteristics of the unit and the surrounding area;

(iii) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water;

(iv) The quantity and direction of ground water flow;

(v) The proximity to and withdrawal rates of current and potential ground water users;

(vi) The patterns of land use in the region;

(vii) The potential for deposition or migration of waste constituents into subsurface physical structures, and into the root zone of food-chain crops and other vegetation;

(viii) The potential for health risks caused by human exposure to waste constituents; and

(ix) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(b) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, or wetlands or on the soil surface considering:

(i) The volume and physical and chemical characteristics of the waste in the unit;

(ii) The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

(iii) The hydrologic characteristics of the unit and the surrounding area, including the topography of the land around the unit;

(iv) The patterns of precipitation in the region;

(v) The quantity, quality, and direction of ground water flow;

(vi) The proximity of the unit to surface waters;

(vii) The current and potential uses of nearby surface waters and any water quality standards established for those surface waters;

(viii) The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;

(ix) The patterns of land use in the region;

(x) The potential for health risks caused by human exposure to waste constituents; and

(xi) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(c) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering:

(i) The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols and particulates;

(ii) The effectiveness and reliability of systems and structures to reduce or prevent emissions of dangerous constituents to the air;

(iii) The operating characteristics of the unit;

(iv) The atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area;

(v) The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

(vi) The potential for health risks caused by human exposure to waste constituents; and

(vii) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(3) Monitoring, analysis, inspection, response, reporting, and corrective action. Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies must ensure compliance with subsection (2) of this section, WAC 173-303-320, 173-303-340(1), 173-303-390, and 173-303-646(2) as well as meet any additional requirements needed to protect human health and the environment as specified in the permit.

(4) Postclosure 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 postclosure care period. In addition, if a treatment or storage unit has contaminated soils or ground water that cannot be completely removed or decontaminated during closure, then that unit must also meet the requirements of subsection (2) of this section during postclosure care. The postclosure plan under WAC 173-303-610(8) must specify the procedures that will be used to satisfy this requirement.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-680, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-680, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-680, filed 3/7/91, effective 4/7/91.]

WAC 173-303-690 Air emission standards for process vents. (1) Applicability.

(a) The regulations in this section apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes.

(b) Except for 40 CFR 264.1034(d) and (e), this section applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10-ppmw, if these operations are conducted in:

(i) Units that are subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(ii) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of WAC 173-303-800 through 173-303-840.

(c) If the owner or operator of process vents subject to the requirements of 40 CFR 264.1032 through 264.1036 has received a permit under section 3005 of RCRA prior to December 21, 1990, the requirements of 264.1032 through 264.1036 must be incorporated when the permit is reissued under WAC 173-303-840(8) or reviewed under WAC 173-303-806(11).

(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. 95-22-008 (Order 94-30), § 173-303-690, filed 10/19/95, effective 11/19/95.]

WAC 173-303-691 Air emission standards for equipment leaks. (1) Applicability.

(a) The regulations in this section apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes.

(b) Except as provided in 40 CFR 1064(k), this section applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in:

(i) Units that are subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(ii) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of WAC 173-303-800 through 173-303-840.

(c) If the owner or operator of equipment subject to the requirements of 40 CFR 264.1052 through 264.1065 has received a permit under section 3005 of RCRA prior to December 21, 1990, the requirements of 40 CFR 264.1052 through 264.1065 must be incorporated when the permit is reissued under WAC 173-303-840(8) or reviewed under WAC 173-303-806(11).

(d) Each piece of equipment to which this section applies must be marked in such a manner that it can be distinguished readily from other pieces of equipment.

(e) Equipment that is in vacuum service is excluded from the requirements of 40 CFR 264.1052 to 264.1060 if it is identified as required in 40 CFR 264.1064(g)(5).

(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. 95-22-008 (Order 94-30), § 173-303-691, filed 10/19/95, effective 11/19/95.]

WAC 173-303-695 Containment buildings. The requirements for containment buildings at 40 CFR Part 264 Subpart DD are incorporated by reference. The words "regional administrator" will mean "department."

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-695, filed 10/19/95, effective 11/19/95.]

WAC 173-303-700 Requirements for the Washington state extremely hazardous waste management facility at Hanford. (1) Purpose and applicability. The purpose of this section is to set forth the requirements for the Washington EHW management (EHWM) facility located at Hanford, Washington. It is the only facility within the state that is allowed under law to dispose of EHW (RCW 70.105.050).

(2) Waste acceptance at Hanford.

(a) The state operator will accept EHW for treatment, storage, or disposal when:

(i) The waste has been specified in the state operator's permit as not requiring prior approval from the department and the state operator sends a copy of each written request for disposal of waste at the EHWM facility to the department, not later than one week after receiving the request; or

(ii) If the waste has not been specified in the state operator's permit, then the department provides written approval that the waste may be accepted at the EHWM facility. Notices of approval or disapproval will be provided as soon as possible, but not later than 15 days, after the state operator has notified the department. Written approval from the department is not required in emergencies, as specified; and

(iii) The generator has obtained prior written approval for waste acceptance from the state operator;

(iv) The waste is accompanied by a manifest specified in the generator requirements of WAC 173-303-180, Manifest; and

(v) Waste containers meet the labeling and container condition requirements of WAC 173-303-190.

(b) The state operator may accept DW, as defined in this regulation, for storage, treatment, or disposal when:

(i) All the conditions of EHW acceptance, (a) of this subsection, are met;

(ii) The generator and/or operator shows that no other permitted TSD facility in the state will handle such DW. The generator and/or operator must refer to:

(A) County or municipal ordinances or solid waste permits forbidding DW disposal at nearby sites;

(B) The EHWM site being the shortest economical haul distance where other remotely located, DW sites may be available; and

(C) Specific rejection or disapproval, in writing, by nearby DW site operators, public or private; and

(iii) The EHWM facility is designed to handle such a request or can be modified to the extent necessary to adequately dispose of the waste.

(c) The state operator, after consulting with the department, may refuse to accept any waste that does not meet the requirements of the acceptance procedures of this subsection until the facts are ascertained, including but not limited to:

(i) The requirement that samples of waste be taken and analyzed; or

(ii) The condition of the containers by physical inspection of the delivery load.

(d) The state operator may accept dangerous waste under emergency conditions if:

(i) An emergency and potential threat to the public health and safety exists;

(ii) the state operator notifies the department as soon as possible;

(iii) The state operator stores the waste upon delivery until the full manifest has been received and approved by the department; and

(iv) The generator is fully apprised that the waste remains his liability until approved under (d)(iii) of this subsection.

(3) Other applicable requirements. The EHWM facility at Hanford must meet all other requirements of chapter 173-303 WAC, including specific requirements for storage, treatment, transfer and disposal of EHW, and siting, performance, and operation of facilities. The EHWM facility must also meet the following requirements:

(a) The state operator must not remove any dangerous waste from the facility without the department's approval;

(b) The state operator must maintain facilities for telephone and radio contact with the Hanford Reservation security patrol, and include this information with the contingency plan required in WAC 173-303-350;

(c) As a minimum, the state operator must provide personnel having knowledge and background in the following areas:

(i) Inspecting and checking manifests for completeness and accuracy;

(ii) Applied chemistry as it relates to reactivity, explosiveness, and flammability; and

(iii) Industrial hygiene and/or toxicology of industrial, commercial, and agricultural chemicals, and emergency procedures;

(d) The state operator must ensure that new personnel have a complete physical examination and annual checkups thereafter. The physician should be alerted to the kinds of materials the employee has been handling, so that more specific analyses can be made. The medical records must be made a part of the state operator's records as required in WAC 173-303-380(1); and

(e) The state operator must submit copies of all fee schedules to the department for yearly review and approval. The state operator must supply, and the department will use, the following criteria to review such disposal fees:

(i) Their relationship to other fees charged for similar services;

(ii) Reasonable return on investment and profit for the operator; and

(iii) The cost of administration, development, operation, maintenance, and perpetual management of the EHW facility, including administrative costs and perpetual management costs of the department.

(4) Department surveillance.

(a) In addition to the reports required under WAC 173-303-390, facility reports, the EHWM facility operator must report the following to the department:

(i) Copies of all environmental sampling results during the previous quarter;

(ii) Telephone and written accounts of any accidents or emergencies requiring action under WAC 173-303-360; and

(iii) Complete financial reports during the previous year.

(b) The state operator must admit the department's duly authorized representative to inspect the site at any reasonable hour of the day. Inspection may cover any of the following:

(i) The site and facilities;

(ii) The waste being delivered, stored, processed, or buried, including the taking of samples, a portion of each sample being given to the operator upon his request;

(iii) The environment, by the drilling of test wells and obtaining of samples; and

(iv) Any records, reports, information, or test results relating to the purpose of this regulation.

The inspection results will be written, filed with the department, and a copy made available to the state operator.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-700, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-700, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-700, filed 2/10/82.]

WAC 173-303-800 Permit requirements for dangerous waste management facilities. (1) The purpose of WAC 173-303-800 through 173-303-840 is to establish the requirements for permits which will allow a dangerous waste facility to operate without endangering the public health and the environment.

(2) The owner/operator of a dangerous waste facility that transfers, treats, stores, or disposes (TSD) or recycles dangerous waste must, when required by this chapter, obtain a permit in accordance with WAC 173-303-800 through 173-303-840 covering the active life, closure period, ground water protection compliance period, and for any regulated unit (as defined in WAC 173-303-040) or for any facility which at closure does not meet the removal or decontamination limits of WAC 173-303-610 (2)(b), post-closure care period, unless they demonstrate closure by removal or decontamination as provided under WAC 173-303-800 (9) and (10). 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;

(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.

(8) Each permit issued under this chapter will contain terms and conditions as the department determines necessary to protect human health and the environment.

(9) Closure by removal. Owners/operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under 40 CFR Part 265 standards as referenced by WAC 173-303-400 must obtain a post-closure permit unless they can demonstrate to the department that the closure met the standards for closure by removal or decontamination in WAC 173-303-650(6), 173-303-655(8), or 173-303-660(9), as appropriate, and such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed standards for closure at 40 CFR Part 264.111, as appropriate. The demonstration may be made in the following ways:

(a) If the owner/operator has submitted a Part B application for a post-closure permit, the owner/operator may request a determination, based on information contained in the application, that 40 CFR Part 264.111 standards for closure by removal were met. If the department believes that 40 CFR Part 264.111 standards were met, the department will notify the public of this proposed decision, allow for public comment, and reach a final determination according to the procedures in subsection (10) of this section.

(b) If the owner/operator has not submitted a Part B application for a post-closure permit, the owner/operator may petition the department for a determination that a post-closure permit is not required because the closure met the applicable 40 CFR Part 264.111 closure standards.

(i) The petition must include data demonstrating that standards for closure by removal or decontamination were met, or it must demonstrate that the unit closed under chapter 173-303 WAC requirements that met or exceeded the applicable 40 CFR Part 264.111 closure-by-removal standard.

(ii) The department will approve or deny the petition according to the procedures outline in subsection (10) of this section.

(10) Procedures for closure equivalency determination.

(a) If a facility owner/operator seeks an equivalency demonstration under subsection (9) of this section, the department will provide the public, through a newspaper

notice, the opportunity to submit written comments on the information submitted by the owner/operator within thirty days from the date of the notice. The department will also, in response to a request or at the discretion of the department, hold a public hearing whenever such a hearing might clarify one or more issues concerning the equivalence of the 40 CFR Part 265 closure, as referenced by WAC 173-303-400, to a 40 CFR Part 264.111 closure. The department will give public notice of the hearing at least thirty days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.)

(b) The department will determine whether the 40 CFR Part 265 closure met 40 CFR Part 264.111 closure by removal or decontamination requirements within ninety days of its receipt. If the department finds that the closure did not meet the applicable 40 CFR Part 264.111 standards, the department will provide the owner/operator with a written statement of the reasons why the closure failed to meet 40 CFR Part 264.111 standards. The owner/operator may submit additional information in support of an equivalency demonstration within thirty days after receiving such written statement. The department will review any additional information submitted and make a final determination within sixty days.

(c) If the department determines that the facility did not close in accordance with 40 CFR Part 264.111 standards for closure by removal, the facility is subject to post-closure permitting requirements.

(11) The department may require a permittee or an applicant to submit information in order to establish permit conditions under subsection (8) of this section and WAC 173-303-806 (11)(d).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-800, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-800, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-800, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-800, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-800, filed 3/11/88; 84-09-088 (Order DE 83-36), § 173-303-800, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-800, filed 2/10/82.]

WAC 173-303-801 Types of dangerous waste management facility permits. The following types of permits may be issued by the department to carry out the purpose of this regulation.

(1) Permits by rule:

(a) Ocean disposal - See WAC 173-303-802(2);

(b) Underground injection wells - See WAC 173-303-802(3);

(c) Publicly owned treatment works - See WAC 173-303-802(4); and

(d) Totally enclosed treatment facilities and elementary neutralization and wastewater treatment units - See WAC 173-303-802(5).

(2) Emergency permits - See WAC 173-303-804.

(3) Interim status permits - See WAC 173-303-805.

(4) Final facility permits:

(a) Final status TSD permits - See WAC 173-303-806; and

(b) Recycling permits - See WAC 173-303-806.

(5) Trial burns for dangerous waste incinerator final facility permits - See WAC 173-303-807.

(6) Demonstrations for dangerous waste land treatment final facility permits - See WAC 173-303-808.

(7) Research, development, and demonstration permits - See WAC 173-303-809.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-801, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-801, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-801, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-801, filed 2/10/82.]

WAC 173-303-802 Permits by rule. (1) Purpose and applicability. This section provides for permit by rule for particular facilities and activities managing dangerous wastes, provided that certain conditions are met. These facilities, activities, and conditions are listed in this section. Owners and operators of facilities with permits by rule are not required to submit an application for a dangerous waste facility permit.

(2) Ocean disposal barges or vessels. The owner or operator of a barge or other vessel which accepts dangerous waste for ocean disposal, will have a permit by rule if the owner or operator:

(a) Has a permit for ocean dumping issued under 40 CFR Part 220 (Ocean Dumping, authorized by the Marine Protection, Research, and Sanctuaries Act, as amended, 33 U.S.C. § 1420 et seq.);

(b) Complies with the conditions of that permit; and

(c) Complies with the following dangerous waste regulations:

(i) WAC 173-303-060, notification and identification numbers;

(ii) WAC 173-303-170 through 173-303-230 when initiating shipments of dangerous waste;

(iii) WAC 173-303-370, manifest system;

(iv) WAC 173-303-380 (1)(a), operating record;

(v) WAC 173-303-390(2), annual report; and

(vi) WAC 173-303-390(1), unmanifested waste report.

(3) Underground injection wells. Underground injection wells with an underground injection control (UIC) permit for underground injection will have a permit by rule if the owner or operator has a UIC permit issued by the department under a federally approved program for underground injection control, and complies with the conditions of the permit and requirements of 40 CFR 144.14 and applicable state waste discharge rules. For UIC permits issued after November 8, 1984, the owner or operator must comply with WAC 173-303-646(2), corrective action for solid waste management units; and where the UIC well is the only unit at a facility which requires a RCRA permit, complies with WAC 173-303-806 (4)(a)(xxiii). All underground injection wells must comply with WAC 173-303-060, notification and identification numbers. However, underground injection wells disposing of EHW are prohibited.

(4) Publicly owned treatment works (POTW). The owner or operator of a POTW which accepts dangerous waste for treatment, will have a permit by rule if the owner or operator:

(a) Has a National Pollutant Discharge Elimination System (NPDES) permit;

(b) Complies with the conditions of that permit;

(c) Complies with the following regulations:

(i) WAC 173-303-060, notification and identification numbers;

(ii) WAC 173-303-170 through 173-303-230 when initiating shipments of dangerous waste;

(iii) WAC 173-303-283, performance standards;

(iv) WAC 173-303-370, manifest system;

(v) WAC 173-303-380 (1)(a), operating record;

(vi) WAC 173-303-390(2), annual report;

(vii) WAC 173-303-390(1), unmanifested waste reports; and

(viii) For NPDES permits issued after November 8, 1984, WAC 173-303-646(2), corrective action for solid waste management units;

(d) Accepts the waste only if it meets all federal, state, and local pretreatment requirements which would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance; and

(e) Accepts no EHW for disposal at the POTW.

(5) Totally enclosed treatment facilities or elementary neutralization or wastewater treatment units.

(a) The owner or operator of a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit that treats dangerous wastes will have a permit by rule, except as provided in (b) of this subsection, if he:

(i) Has 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) Complies with the conditions of that permit;

(iii) Complies with the following regulations:

(A) WAC 173-303-060, notification and identification numbers;

(B) WAC 173-303-070, designation of dangerous waste;

(C) WAC 173-303-283, performance standards;

(D) WAC 173-303-300, general waste analysis;

(E) WAC 173-303-310, security;

(F) WAC 173-303-350, contingency plan and emergency procedures;

(G) WAC 173-303-360, emergencies;

(H) WAC 173-303-370, manifest system;

(I) WAC 173-303-380 (1)(d), operating record;

(J) WAC 173-303-390, facility reporting.

(b) The department may require the owner or operator of a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit subject to (a) of this subsection to apply for and obtain a final facility permit in accordance with WAC 173-303-800 through 173-303-840, if:

(i) The owner or operator violates the general facility or performance requirements specified in (a) of this subsection;

(ii) The owner or operator is conducting other activities which require him to obtain a final facility permit;

(iii) The department determines that the general facility or performance requirements specified in (a) of this subsection, are not sufficient to protect public health or the environment and that additional requirements under this chapter are necessary to provide such protection; or

(iv) The owner or operator does not comply with applicable local, state or federal requirements established pursuant to sections 402 or 307(b) of the Federal Clean Water Act, or chapter 90.48 RCW.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-802, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-802, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-802, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-802, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-802, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-802, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-802, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-802, filed 4/18/84.]

WAC 173-303-804 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 moderate risk wastes;

(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 decisionmaking 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 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 and 70.105D RCW. 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) Applicability. This section applies to all facilities eligible for an interim status permit. When a facility is owned by one person but is operated by another person, it is the operator's duty to qualify for interim status, except that the owner must also sign an interim status application. Prior to submittal of an interim status permit application the requirements of WAC 173-303-281 must be met.

(2) Failure to qualify for interim status. If the department has reason to believe upon examination of a Part A application that it fails to provide the required information, it will notify the owner or operator in writing of the apparent deficiency. Such notice will specify the grounds for the department's belief that the application is deficient. The owner or operator will have thirty days from receipt to respond to such a notification and to explain or cure the alleged deficiency in his Part A application. If, after such notification and opportunity for response, the department determines that the application is deficient it may take appropriate enforcement action.

(3) Interim status for facilities under RCRA interim status. Any existing facility operating under interim status gained under section 3005 of RCRA will be deemed to have an interim status permit under this chapter provided that the owner/operator complies with the applicable requirements of WAC 173-303-400 and this section.

(4) Interim status for facilities managing state-designated (non-RCRA) dangerous wastes. Any existing facility which does not satisfy subsection (3) of this section, but which is only managing dangerous wastes that are not hazardous wastes under 40 CFR Part 261, will be deemed to have an interim status permit provided that the owner/operator of the facility has complied with the notification requirements of WAC 173-303-060 by May 11, 1982 and has submitted Part A of his permit application by August 9, 1982. If an existing facility becomes subject to this chapter due to amendments to this chapter and the facility was not previously subject to this chapter, then the owner/operator of an existing facility may qualify for an interim status permit by complying with the notification requirements of WAC 173-303-060 within three months, and submitting Part A of his permit application within six months, after the adoption date of the amendments which cause the facility to be subject to the requirements of this chapter. Facilities qualifying for interim status under this subsection will not be deemed to have interim status under section 3005 of RCRA, and may only manage non-RCRA wastes until they either qualify separately for interim status under section 3005 of RCRA or receive a final status facility permit allowing them to manage RCRA wastes.

(5) Maintaining the interim status permit.

(a) Timely notification and submission of a Part A application qualifies the owner/operator of the existing TSD facility for the interim status permit, until the department terminates interim status pursuant to subsection (8) of this section.

(b) Interim status for the existing TSD facility will be maintained while the department makes final administrative disposition of a final facility permit pursuant to WAC 173-303-806 if:

(i) The owner/operator has submitted his final facility permit application (as described in WAC 173-303-806) within six months of the written request by the department to submit such application; and

(ii) Grounds for terminating interim status (as described in subsection (8) of this section) do not exist.

(c) The owner/operator of an interim status facility must update his Part A whenever he is managing wastes that are newly regulated under this chapter, and as necessary to comply with subsection (7) of this section. Failure to comply with this updating requirement is a violation of interim status.

(6) Prohibitions for interim status permits. Facilities with an interim status permit must not:

(a) Treat, store, or dispose of dangerous waste not specified in Part A of the permit application;

(b) Employ processes not specified in Part A of the permit application; or

(c) Exceed the design capacities specified in Part A of the permit application.

(7) Changes during interim status.

(a) Except as provided in (b) of this subsection, the owner or operator of an interim status facility may make the following changes at the facility:

(i) Treatment, storage, or disposal of new dangerous wastes not previously identified in Part A of the permit application (and, in the case of newly listed or identified wastes, addition of the units being used to treat, store, or dispose of the dangerous wastes on the effective date of the listing or identification) if the owner or operator submits a revised Part A permit application prior to such treatment, storage, or disposal (along with a justification detailing the equipment and process or processes that the owner or operator will use to treat, store, or dispose of the new dangerous wastes) and if the department does not explicitly deny the changes within sixty days of receipt of the revised application;

(ii) Increases in the design capacity of processes used at the facility if the owner or operator submits a revised Part A permit application prior to such a change (along with a justification explaining the need for the change), the requirements of WAC 173-303-281 are met, and the department approves the changes because:

(A) There is a lack of available treatment, storage, or disposal capacity at other dangerous waste management facilities; or

(B) The change is necessary to comply with a federal, state, or local requirement.

(iii) Changes in the processes for the treatment, storage, or disposal of dangerous waste or addition of processes if the owner or operator submits a revised Part A permit application prior to such change (along with a justification explain-

ing the need for the change) and the department approves the change because:

(A) The change is necessary to prevent a threat to human health and the environment because of an emergency situation; or

(B) The change is necessary to comply with a federal, state, or local requirement.

(iv) Changes in the ownership or operational control of a facility if the new owner or operator submits a revised Part A permit application no later than ninety days prior to the scheduled change. When a transfer of operational control of a facility occurs, the old owner or operator must comply with the interim status financial requirements of 40 CFR Part 265, Subpart H (as referenced in WAC 173-303-400), until the new owner or operator has demonstrated to the department that he is complying with the financial requirements. Upon demonstration to the department by the new owner or operator of compliance with the interim status financial requirements, the department will notify the old owner or operator in writing that he no longer needs to comply with the interim status financial requirements as of the date of demonstration. The new owner or operator must demonstrate compliance with the financial requirements within six months of the date of the change in ownership or operational control of the facility. All other interim status duties are transferred effective immediately upon the date of the change in ownership or operational control of the facility.

(v) Changes made in accordance with an interim status corrective action order issued by EPA under section 3008(h) of RCRA or other federal authority, including an order or consent decree issued pursuant to WAC 173-303-646 (2) or (3), by the department under chapter 70.105 RCW or other state authority, or by a court in a judicial action brought by EPA or by the department. Changes under this subsection (7)(a)(v) are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(vi) Addition of newly regulated units for the treatment, storage, or disposal of dangerous waste if the owner or operator submits a revised Part A permit application on or before the date on which the unit becomes subject to the new requirements.

(b) Except as specifically allowed under this subsection (7)(b), changes listed under (a) of this subsection may not be made if they amount to reconstruction of the dangerous waste management facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds fifty percent of the capital cost of a comparable entirely new dangerous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

(i) Changes made solely for the purposes of complying with the requirements of WAC 173-303-640(4) for tanks and ancillary equipment.

(ii) If necessary to comply with federal, state, or local requirements, changes to an existing unit, changes solely involving tanks or containers, or addition of replacement surface impoundments that satisfy the standards of section 3004(o) of RCRA.

(iii) Changes that are necessary to allow owners or operators to continue handling newly listed or identified dangerous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of the rule establishing the new listing or identification.

(iv) Changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan.

(v) Changes necessary to comply with an interim status corrective action order issued by EPA under section 3008(h) or other federal authority, by the department under chapter 70.105 RCW or other state authority, or by a court in a judicial proceeding brought by EPA or an authorized state, provided that such changes are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(vi) Changes to treat or store, in tanks, containers, or containment buildings hazardous wastes subject to land disposal restrictions imposed by 40 CFR Part 268 or RCRA section 3004, provided that such changes are made solely for the purpose of complying with 40 CFR Part 268 or RCRA section 3004.

(vii) Addition of newly regulated units under (a)(vi) of this subsection.

(8) Termination of interim status permit. The following are causes for terminating an interim status permit, or for denying a revised permit application:

(a) Final administrative disposition of a final facility permit application is made pursuant to WAC 173-303-806;

(b) When the department on examination or reexamination of a Part A application determines that it fails to meet the applicable standards of this chapter, it may notify the owner or operator that the application is deficient and that the interim status permit has been revoked. The owner or 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 ground water monitoring and financial responsibility requirements.

(g) For owners or operators of each land disposal facility which is in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act that render the facility subject to the requirement to have a final facility permit and which is granted interim status, interim status terminates twelve months after the date on which the facility first becomes subject to such permit requirement unless the owner or operator of such facility:

(i) Submits a Part B application for a final facility permit for such facility before the date twelve months after

the date on which the facility first becomes subject to such permit requirement; and

(ii) Certifies that such facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(h) For owners or operators of any land disposal unit that is granted authority to operate under subsection (7)(a)(i), (ii) or (iii) of this section, interim status terminates on the date twelve months after the effective date of such requirement, unless the owner or operator certifies that such unit is in compliance with all applicable ground water monitoring and financial responsibility requirements;

(i) For owners and operators of each incinerator facility which achieved interim status prior to November 8, 1984, interim status terminated on November 8, 1989, unless the owner or operator of the facility submitted a Part B application for a final facility permit for an incinerator facility by November 8, 1986; or

(j) For owners or operators of any facility (other than a land disposal or an incinerator facility) which has achieved interim status prior to November 8, 1984, interim status terminated on November 8, 1992, unless the owner or operator of the facility submitted a Part B application for a final facility permit for the facility by November 8, 1988.

(9)

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-805, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-805, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-805, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-805, filed 1/4/89; 88-18-083 (Order 88-29), § 173-303-805, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-805, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-805, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-805, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-805, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-805, filed 2/10/82.]

WAC 173-303-806 Final facility permits. (1) Applicability. This section applies to all dangerous waste facilities required to have a final facility permit. The final facility permit requirements are applicable to:

(a) Final status TSD facilities; and

(b) Certain recycling facilities that are not exempt from the permit requirements.

(2) 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.

(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 (i) of this subsection.

(a) General requirements. Part B of the permit application consists of the general information requirements of this subsection, and the specific information requirements in (b) through (h) of this subsection as applicable to the facility. The Part B information requirements presented in (a) through (h) of this subsection, reflect the standards promulgated in WAC 173-303-600. These information requirements are necessary in order for the department to determine compliance with WAC 173-303-600 through 173-303-670. If owners and operators of TSD facilities can demonstrate that the information prescribed in Part B cannot be provided to the extent required, the department may make allowance for submission of such information on a case-by-case basis. Information required in Part B must be submitted to the department and signed in accordance with requirements in WAC 173-303-810(12). Certain technical data, such as design drawings and specifications, and engineering studies must be certified by a registered professional engineer. The following information is required for all TSD facilities, except as WAC 173-303-600(3) provides otherwise.

(i) A general description of the facility.

(ii) Chemical, biological, and physical analyses of the dangerous waste and hazardous debris to be handled at the facility. At a minimum, these analyses must contain all the information which must be known to treat, store, or dispose of the wastes properly in accordance with WAC 173-303-600.

(iii) A copy of the waste analysis plan required by WAC 173-303-300(5) and, if applicable WAC 173-303-300 (5)(g).

(iv) A description of the security procedures and equipment required by WAC 173-303-310, or a justification demonstrating the reasons for requesting a waiver of this requirement.

(v) A copy of the general inspection schedule required by WAC 173-303-320(2): Include where applicable, as part of the inspection schedule, specific requirements in WAC 173-303-395 (1)(d), 173-303-630(6), 173-303-640 (4)(a)(i) and (6), 173-303-650(4), 173-303-655(4), 173-303-660 (4) and (5), 173-303-665(4), 173-303-670(7), and 173-303-680(3), and 40 CFR 264.1033, 264.1035, 264.1052, 264.1053, 264.1058, 264.1064, 264.1067, 264.1088, and 264.1091.

(vi) A justification of any request for a waiver(s) of the preparedness and prevention requirements of WAC 173-303-340, or a description of the procedures used to comply with these requirements.

(vii) A copy of the contingency plan required by WAC 173-303-350: Include, where applicable, as part of the

contingency plan, specific requirements in WAC 173-303-640(7), 173-303-650(5) and 173-303-660(6).

(viii) A description of procedures, structures, or equipment used at the facility to:

(A) Prevent hazards and contain spills in unloading/loading operations (for example, ramps, berms, pavement, special forklifts);

(B) Prevent run-off from dangerous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);

(C) Prevent contamination of water supplies;

(D) Mitigate effects of equipment failure and power outages;

(E) Prevent undue exposure of personnel to dangerous waste (for example, protective clothing); and

(F) Prevent releases to the atmosphere.

(ix) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required to demonstrate compliance with WAC 173-303-395 including documentation demonstrating compliance with WAC 173-303-395 (1)(c).

(x) Traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes (if appropriate); describe access road surfacing and load bearing capacity; show traffic control signals).

(xi) Seismic risk consideration. The owner/operator of a proposed facility or expansion of an existing facility must identify the seismic risk zone in which the facility is intended to be located. Where state or local maps are not available, United States Geological Survey Open File Report number 82-1033 may be used to identify seismic risk zones. The owner/operator must demonstrate that the facility can and will be designed to resist seismic ground motion and that the design is sufficient to withstand the maximum horizontal acceleration of a design earthquake specified in the demonstration.

(xii) An outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the TSD facility in a safe manner as required to demonstrate compliance with WAC 173-303-330. A brief description of how training will be designed to meet actual job tasks in accordance with requirements in WAC 173-303-330 (1)(d).

(xiii) A copy of the closure plan and, where applicable, the post-closure plan required by WAC 173-303-610 (3) and (8). Include, where applicable, as part of the plans, specific requirements in WAC 173-303-630(10), 173-303-640(8), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), and 173-303-680 (2) and (4).

(xiv) For dangerous waste disposal units that have been closed, documentation that notices required under WAC 173-303-610(10) have been filed.

(xv) The most recent closure cost estimate for the facility prepared in accordance with WAC 173-303-620(3) and a copy of the documentation required to demonstrate financial assurance under WAC 173-303-620(4). For a new facility, a copy of the required documentation may be submitted sixty days prior to the initial receipt of dangerous wastes, if that is later than the submission of the Part B.

(xvi) Where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with WAC 173-303-620(5) plus a copy of the documentation required to demonstrate financial assurance under WAC 173-303-620(6). For a new facility, a copy of the required documentation may be submitted sixty days prior to the initial receipt of dangerous wastes, if that is later than the submission of the Part B.

(xvii) Where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of WAC 173-303-620(8). For a new facility, documentation showing the amount of insurance meeting the specification of WAC 173-303-620 (8)(a) and, if applicable, WAC 173-303-620 (8)(b), that the owner or operator plans to have in effect before initial receipt of dangerous waste for treatment, storage, or disposal. A request for a variance in the amount of required coverage, for a new or existing facility, may be submitted as specified in WAC 173-303-620 (8)(c).

(xviii) A topographic map showing a distance of one thousand feet around the facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet). Contours must be shown on the map. The contour interval must be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters (5 feet), if relief is greater than 6.1 meters (20 feet), or an interval of 0.6 meters (2 feet), if relief is less than 6.1 meters (20 feet). Owners and operators of TSD facilities located in mountainous areas should use large contour intervals to adequately show topographic profiles of facilities. The map must clearly show the following:

(A) Map scale and date;

(B) One hundred-year floodplain area;

(C) Surface waters including intermittent streams;

(D) Surrounding land uses (residential, commercial, agricultural, recreational);

(E) A wind rose (i.e., prevailing windspeed and direction);

(F) Orientation of the map (north arrow);

(G) Legal boundaries of the TSD facility site;

(H) Access control (fences, gates);

(I) Injection and withdrawal wells both on-site and off-site;

(J) Buildings; treatment, storage, or disposal operations; or other structure (recreation areas, run-off control systems, access and internal roads, storm, sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, etc.);

(K) Barriers for drainage or flood control;

(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); and

(M) 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.

(Note - For large TSD facilities the department will allow the use of other scales on a case-by-case basis.)

(xix) Applicants may be required to submit such information as may be necessary to enable the department to carry out its duties under other state or federal laws as required.

(xx) Additional information requirements. The following additional information regarding protection of ground water is required from owners or operators of dangerous waste facilities containing a regulated unit except as otherwise provided in WAC 173-303-645 (1)(b):

(A) A summary of the ground water monitoring data obtained during the interim status period under 40 CFR 265.90 through 265.94, where applicable;

(B) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including ground water flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);

(C) On the topographic map required under (a)(xviii) of this subsection, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under WAC 173-303-645(6), the proposed location of ground water monitoring wells as required under WAC 173-303-645(8), and, to the extent possible, the information required in (a)(xx)(B) of this subsection;

(D) A description of any plume of contamination that has entered the ground water from a regulated unit at the time that the application was submitted that:

(I) Delineates the extent of the plume on the topographic map required under (a)(xviii) of this subsection;

(II) Identifies the concentration of each constituent throughout the plume or identifies the maximum concentrations of each constituent in the plume. (Constituents are those listed in Appendix IX of 40 CFR Part 264, and any other constituents not listed there which have caused a managed waste to be regulated under this chapter.);

(E) Detailed plans and an engineering report describing the proposed ground water monitoring program to be implemented to meet the requirements of WAC 173-303-645(8);

(F) If the presence of dangerous constituents has not been detected in the ground water at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of WAC 173-303-645(9). This submission must address the following items specified under WAC 173-303-645(9):

(I) A proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of dangerous constituents in the ground water;

(II) A proposed ground water monitoring system;

(III) Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

(IV) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground water monitoring data;

(G) If the presence of dangerous constituents has been detected in the ground water at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of WAC 173-303-645(10). The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of WAC 173-303-645(11) except as provided in WAC 173-303-645 (9)(h)(v). Alternatively, the owner or operator can obtain written authorization in advance from the department to submit a proposed permit schedule for development and submittal of such information. To demonstrate compliance with WAC 173-303-645(10), the owner or operator must address the following items:

(I) A description of the wastes previously handled at the facility;

(II) A characterization of the contaminated ground water, including concentrations of dangerous constituents and parameters;

(III) A list of constituents and parameters for which compliance monitoring will be undertaken in accordance with WAC 173-303-645 (8) and (10);

(IV) Proposed concentration limits for each dangerous constituent and parameter, based on the criteria set forth in WAC 173-303-645 (5)(a), including a justification for establishing any alternate concentration limits;

(V) Detailed plans and an engineering report describing the proposed ground water monitoring system, in accordance with the requirements of WAC 173-303-645(8); and

(VI) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground water monitoring data; and

(H) If dangerous constituents or parameters have been measured in the ground water which exceed the concentration limits established under WAC 173-303-645(5), Table 1, or if ground water monitoring conducted at the time of permit application under 40 CFR 265.90 through 265.94 at the waste boundary indicates the presence of dangerous constituents from the facility in ground water over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of WAC 173-303-645(11). However, an owner or operator is not required to submit information to establish a corrective action program if he demonstrates to the department that alternate concentration limits will protect human health and the environment after considering the criteria listed in WAC 173-303-645(5). An owner or operator who is not required to establish a corrective action program for this reason must instead submit sufficient information to establish a compliance monitoring program which meets the requirements of WAC 173-303-645 (10) and (a)(xx)(F) of this subsection. To demonstrate compliance with WAC 173-303-645(11), the owner or operator must address, at a minimum, the following items:

(I) A characterization of the contaminated ground water, including concentrations of dangerous constituents and parameters;

(II) The concentration limit for each dangerous constituent and parameter found in the ground water as set forth in WAC 173-303-645(5);

(III) Detailed plans and an engineering report describing the corrective action to be taken;

(IV) A description of how the ground water monitoring program will demonstrate the adequacy of the corrective action; and

(V) The permit may contain a schedule for submittal of the information required in (a)(xx)(H)(III) and (IV) of this subsection, provided the owner or operator obtains written authorization from the department prior to submittal of the complete permit application.

(xxi) Contingent ground water protection program. The following actions are required for owners or operators of proposed land-based facilities and may be required for owners/operators of existing land-based facilities, except as provided in WAC 173-303-645 (1)(b).

(A) Contingent ground water protection program. The owner or operator must develop a contingent ground water protection program. The purpose of this program will be to prevent the migration of dangerous waste or dangerous waste constituents from waste management units to the nearest hydraulically downgradient receptor at any time during the life of the facility. For the purposes of this subsection, the downgradient receptor will be the facility property line, perennial surface water or domestic well, whichever is nearest to the dangerous waste management unit. The contingent ground water protection program must at a minimum:

(I) Define the local and regional hydrogeologic characteristics. The contingent ground water protection program must be based on a sufficient understanding of site geology, hydrology, and other factors to allow evaluation of its adequacy by the department. Site characterization must be performed in sufficient detail to provide, at a minimum, the following information: Site geostratigraphy; site hydrostratigraphy; identification of aquifers, aquitards, and aquicludes; flow models for each stratum (i.e., porus media or fracture flow); the distribution of vertical and horizontal hydraulic conductivity; effective porosity; horizontal and vertical hydraulic gradients; ground water travel time to receptors; and heterogeneity for each stratigraphic unit. Site interpretative models must include ranges of tested values: The provisions of WAC 173-303-806 (4)(a)(xx) and 173-303-645, must be used as guidance in the development of the contingent ground water protection program.

(II) Identify the range of potential release scenarios that could occur during facility operation and the postclosure care period. The scenarios must incorporate the intended design(s) of the dangerous waste management unit(s), wastes to be placed in the dangerous waste management unit(s), waste and leachate chemistry, waste, and soil and rock geochemical interactions, and the results of site characterization pursuant to WAC 173-303-806 (4)(a)(xx) and (xxi);

(III) Include specific physical action to be taken if dangerous waste or dangerous waste constituents are detected in one or more of the monitoring wells. The physical actions must be based upon engineering feasibility studies describing remedial actions established from site specific conditions and waste features. Such actions may include installation of a pump and treat system between the monitoring well and the receptor or installation of a section of slurry wall to decrease ground water travel times. The description of the systems must also provide how the remediation system will achieve cleanup, its efficiency, and the timeframes involved;

(IV) Incorporate the design, construction, and sampling methods outlined in WAC 173-303-645 (8)(c), (d), (e), (f), and (g);

(V) Demonstrate to the satisfaction of the department that the owner/operator of the dangerous waste management facility has the financial capability to implement the proposed ground water protection plan; and

(VI) Include reporting procedures to the department.

(B) The response actions identified in WAC 173-303-806 (4)(a)(xxi)(A)(III) must be activated if the presence of dangerous waste or dangerous waste constituents have been detected at the point of compliance in accordance with WAC 173-303-645 (9)(g), and must continue until the concentration of dangerous waste or dangerous waste constituents under WAC 173-303-645(4) are reduced to levels below their respective concentration limits specified in WAC 173-303-645(5).

(C) If the owner/operator does not demonstrate that the ground water protection program will prevent the migration of dangerous waste or its constituents to the nearest receptor, the department will require corrections to be made in the protection program, increase setbacks from the nearest receptor, or deny the permit.

(xxii) Additional requirements for incineration facilities. The following actions regarding the protection of human health and the environment must be taken by owners/operators of proposed hazardous waste incineration facilities and may be required for owners or operators of existing incineration facilities.

(A) Ambient monitoring program. The owner/operator will be required to develop an ambient monitoring program. The purpose of this ambient monitoring program will be to: Gather baseline environmental information characterizing on-site and off-site environmental conditions prior to facility operation; and, to identify and measure changes in the environment which may be linked to the construction and operation of the facility. The ambient monitoring program must, at a minimum:

(I) Include a characterization of facility emission sources and pathways of contaminant transport.

(II) Characterize local and regional ecosystems, including agricultural, and their sensitivity to the potential contaminants from the facility.

(III) Incorporate the findings of the environmental impact statement's health risk assessment and/or other assessments specific to the proposal or available to the scientific community regarding emissions from dangerous waste management facilities and their potential human health and environmental effects.

(IV) Identify sensitive indicator plants and animals for biomonitoring, identify specific chemical constituents of concern, sampling locations, sampling frequency, sampling and analytical methods, chain of custody procedures, quality assurance/quality control procedures, reporting times, recordkeeping procedures, and data evaluation procedures.

(B) Environmental review procedures. The owner/operator must establish procedures to allow for public review of facility operation and all monitoring data required by the facility's permit. In developing this process, the owner/operator must, at a minimum:

(I) Coordinate this effort with the public and interested local organizations;

(II) Identify the informational needs of the community and develop a public information process which meets these needs; and

(III) Develop procedures allowing full access by the public to all monitoring data required by the permit.

(C) Impact mitigation plan. Prior to the department issuing a permit, the owner/operator must submit an impact mitigation plan which demonstrates to the satisfaction of the department that the owner/operator will mitigate all probable significant adverse impacts, including economic, due to facility location and operations. The owner/operator must use as a basis for identifying probable significant adverse economic impacts those probable economic impacts identified during a public review process, such as the environmental impact statement scoping process, if applicable.

The plan must include, but is not limited to, a description of what the owner/operator will do to reduce or prevent any probable significant impacts before they occur, to mitigate such impacts should they occur, and to ensure the owner/operator has and will have the financial capability to implement such preventative and mitigative measures. Mitigation measures may include, as an element, financial compensation to adversely affected parties.

This plan may be submitted with environmental reports the department requires for compliance with the State Environmental Policy Act, with the written citizen proponent negotiation report and agreements, or with the Part B permit application. If the plan does not demonstrate that the owner/operator is capable of adequately mitigating the identified probable significant adverse economic impacts, the department will require modification of the plan or of the proposed facility location, or will deny the permit application. The department must be satisfied with the plan prior to the issuance of the permit.

(xxiii) Information requirements for solid waste management units.

(A) The following information is required for each solid waste management unit:

(I) The location of the unit on the topographic map required under (a)(xviii) of this subsection.

(II) Designation of type of unit.

(III) General dimensions and structural description (supply any available drawings).

(IV) Time frame over which the unit was operated.

(V) Specification of all wastes that have been managed in the unit, to the extent available.

(B) The owner/operator of any facility containing one or more solid waste management units must submit all available information pertaining to any release of dangerous wastes or dangerous constituents from such unit or units.

(C) The owner/operator must conduct and provide the results of sampling and analysis of ground water, landsurface, and subsurface strata, surface water, or air, which may include the installation of wells, where the department determines it is necessary to complete a RCRA Facility Assessment that will determine if a more complete investigation is necessary.

WAC 173-303-806 (4)(a)(xxiv):

(xxiv) Information requirements for known releases.

(A) In order to provide for corrective action necessary to protect human health and the environment, the following information is required for all known significant releases of dangerous waste and dangerous constituents (as defined by WAC 173-303-646 (2)(c)) at, and from, the facility. A significant release is a release which has affected or has the potential to affect human health or the environment at or beyond the facility.

(I) The location of the release on the topographic map required under (a)(xviii) of this subsection.

(II) General dimensions of the release and any relevant structural description. For example, if the release is from a storage tank, provide a structural description of the tank. Supply any available drawings.

(III) Time frame over which the release occurred.

(IV) Specification of all dangerous waste or dangerous constituents (as defined by WAC 173-303-646 (2)(c)) present in the release, to the extent available.

(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; and

(v) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with WAC 173-303-630 (9)(a) and (b), and 173-303-395 (1)(b) and (c).

(c) Specific Part B information requirements for tanks. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that use tanks to store or

treat dangerous waste must provide the following information:

(i) A written assessment that is reviewed and certified by an independent, qualified, registered professional engineer as to the structural integrity and suitability for handling dangerous waste of each tank system, as required under WAC 173-303-640 (2) and (3);

(ii) Dimensions and capacity of each tank;

(iii) Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);

(iv) A diagram of piping, instrumentation, and process flow for each tank system;

(v) A description of materials and equipment used to provide external corrosion protection, as required under WAC 173-303-640 (3)(a)(iii)(B);

(vi) For new tank systems, a detailed description of how the tank system(s) will be installed in compliance with WAC 173-303-640 (3)(b), (c), (d), and (e);

(vii) Detailed plans and a description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of WAC 173-303-640 (4)(a), (b), (c), (d), (e), and (f);

(viii) For tank systems for which a variance from the requirements of WAC 173-303-640(4) is sought (as provided by WAC 173-303-640 (4)(g)):

(A) Detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous waste or dangerous constituents into the ground water or surface water during the life of the facility; or

(B) A detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment.

(ix) Description of controls and practices to prevent spills and overflows, as required under WAC 173-303-640 (5)(b);

(x) For tank systems in which ignitable, reactive, or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with the requirements of WAC 173-303-640 (9) and (10);

(xi) A description of the marking and/or labeling of tanks; and

(xii) Tank design to prevent escape of vapors and emissions of acutely or chronically toxic (upon inhalation) EHW.

(d) Specific Part B information requirements for surface impoundments. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that store, treat, or dispose of dangerous waste in surface impoundments must provide the following additional information:

(i) A list of the dangerous wastes placed or to be placed in each surface impoundment;

(ii) Detailed plans and an engineering report describing how the surface impoundment is designed, and is or will be constructed, operated and maintained to meet the requirements of WAC 173-303-650(2)(j), (10), (11), and 173-303-335, addressing the following items:

(A) The liner system (except for an existing portion of a surface impoundment), including the certification required by WAC 173-303-650 (2)(a)(i)(D) for EHW management. If an exemption from the requirement for a liner is sought as provided by WAC 173-303-650 (2)(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituents into the ground water or surface water at any future time;

(B) Prevention of overtopping;

(C) Structural integrity of dikes;

(D) The double liner and leak (leachate) detection, collection, and removal system, if the surface impoundment must meet the requirements of WAC 173-303-650 (2)(j). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-650 (2)(k), (l), or (m), submit appropriate information;

(E) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(F) The construction quality assurance (CQA) plan if required under WAC 173-303-335; and

(G) Proposed action leakage rate, with rationale, if required under WAC 173-303-650(10), and response action plan, if required under WAC 173-303-650(11).

(iii) Reserve.

(iv) A description of how each surface impoundment, including the double liner system, leak detection system, cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of WAC 173-303-650 (4)(a), (b), and (d). This information should be included in the inspection plan submitted under (a)(v) of this subsection;

(v) A certification by a qualified engineer which attests to the structural integrity of each dike, as required under WAC 173-303-650 (4)(c). For new units, the owner or operator must submit a statement by a qualified engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications;

(vi) A description of the procedure to be used for removing a surface impoundment from service, as required under WAC 173-303-650 (5)(b) and (c). This information should be included in the contingency plan submitted under (a)(vii) of this subsection;

(vii) A description of how dangerous waste residues and contaminated materials will be removed from the unit at closure, as required under WAC 173-303-650 (6)(a)(i). For any wastes not to be removed from the unit upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-650 (6)(a)(ii) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection;

(viii) If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how WAC 173-303-650(7) will be complied with;

(ix) If incompatible wastes, or incompatible wastes and materials will be placed in a surface impoundment, an explanation of how WAC 173-303-650(8) will be complied with; and

(x) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how the surface impoundment is or will be designed to meet the requirements of WAC 173-303-650(9).

(e) Specific Part B information requirements for waste piles. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that store or treat dangerous waste in waste piles must provide the following additional information:

(i) A list of dangerous wastes placed or to be placed in each waste pile;

(ii) If an exemption is sought to WAC 173-303-660(2), and 173-303-645 as provided by WAC 173-303-660 (1)(c), an explanation of how the standards of WAC 173-303-660 (1)(c) will be complied with;

(iii) Detailed plans and an engineering report describing how the waste pile is designed, and is or will be constructed, operated, and maintained to meet the requirements of WAC 173-303-335, 173-303-660(2)(j), (11) and (12), addressing the following items:

(A)(I) The liner system (except for an existing portion of a pile) if the waste pile must meet the requirements of WAC 173-303-660(2), including the licensed engineer's certification when required by WAC 173-303-660 (2)(c). If an exemption from the requirement for a liner is sought, as provided by WAC 173-303-660 (2)(d), submit detailed plans and engineering and hydrogeologic reports, as applicable, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituents into the ground water or surface water at any future time;

(II) The double liner and leak (leachate) detection, collection, and removal system, if the waste pile must meet the requirements of WAC 173-303-660 (2)(j). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-660 (2)(k), (l), or (m), submit appropriate information;

(III) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(IV) The construction quality assurance (CQA) plan if required under WAC 173-303-335;

(V) Proposed action leakage rate, with rationale, if required under WAC 173-303-660(3), and response action plan, if required under WAC 173-303-660(4);

(B) Control of run-on;

(C) Control of run-off;

(D) Management of collection and holding units associated with run-on and run-off control systems; and

(E) Control of wind dispersal of particulate matter, where applicable;

(iv) Reserve.

(v) A description of how each waste pile, including the double liner system, leachate collection and removal system, leak detection system, cover system and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of WAC 173-303-660(5). This information should be included in the inspection plan submitted under (a)(v) of this subsection. If an exemption is sought to WAC 173-303-645 pursuant to WAC 173-303-660(4), describe in the inspection plan how the inspection requirements of WAC 173-303-660 (4)(a)(iii) will be complied with;

(vi) If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;

(vii) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how the requirements of WAC 173-303-660(7) will be complied with;

(viii) If incompatible wastes, or incompatible wastes and materials will be placed in a waste pile, an explanation of how WAC 173-303-660(8) will be complied with;

(ix) A description of how dangerous waste, waste residues and contaminated materials will be removed from the waste pile at closure, as required under WAC 173-303-660 (9)(a). For any waste not to be removed from the waste pile upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-665 (6)(a) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection;

(x) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how a waste pile that is not enclosed (as defined in WAC 173-303-660 (1)(c)) is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-660(10).

(f) Specific Part B information requirements for incinerators. Except as WAC 173-303-670(1) provides otherwise, owners and operators of facilities that incinerate dangerous waste must fulfill the informational requirements of (f) of this subsection.

(i) When seeking an exemption under WAC 173-303-670 (1)(b) (ignitable or reactive wastes only):

(A) Documentation that the waste is listed as a dangerous waste in WAC 173-303-080, solely because it is ignitable; or

(B) Documentation that the waste is listed as a dangerous waste in WAC 173-303-080, solely because it is reactive for characteristics other than those listed in WAC 173-303-090 (7)(a)(iv) and (v), and will not be burned when other dangerous wastes are present in the combustion zone; or

(C) Documentation that the waste is a dangerous waste solely because it possesses the characteristic of ignitability, as determined by the tests for characteristics of dangerous waste under WAC 173-303-090; or

(D) Documentation that the waste is a dangerous waste solely because it possesses the reactivity characteristics listed in WAC 173-303-090 (7)(a)(i), (ii), (iii), (vi), (vii), and (viii), and that it will not be burned when other dangerous wastes are present in the combustion zone.

(ii) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with WAC 173-303-807.

(iii) In lieu of a trial burn, the applicant may submit the following information;

(A) An analysis of each waste or mixture of wastes to be burned including:

(I) Heating value of the waste in the form and composition in which it will be burned;

(II) Viscosity (if applicable), or description of physical form of the waste, and specific gravity of the waste;

(III) An identification of any dangerous organic constituents listed in WAC 173-303-9905 or, if not listed, which cause the waste(s) to be regulated, which are present in the waste to be burned, except that the applicant need not analyze for constituents which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in WAC 173-303-110(3), or their equivalent;

(IV) An approximate quantification of the dangerous constituents identified in the waste, within the precision produced by the analytical methods specified in WAC 173-303-110(3); and

(V) A quantification of those dangerous constituents in the waste which may be designated as principal organic dangerous constituents (PODC's) based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in WAC 173-303-670(4);

(B) A detailed engineering description of the incinerator, including:

(I) Manufacturer's name and model number of incinerator;

(II) Type of incinerator;

(III) Linear dimension of incinerator unit including cross sectional area of combustion chamber;

(IV) Description of auxiliary fuel system (type/feed);

(V) Capacity of prime mover;

(VI) Description of automatic waste feed cutoff system(s);

(VII) Stack gas monitoring and pollution control monitoring system;

(VIII) Nozzle and burner design;

(IX) Construction materials; and

(X) Location and description of temperature, pressure, and flow indicating devices and control devices;

(C) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in (f)(iii)(A) of this subsection. This analysis should specify the principal organic dangerous constituents (PODC's) which the applicant has identified in the waste for which a permit is sought, and any differences from the PODC's in the waste for which burn data are provided;

(D) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available;

(E) A description of the results submitted from any previously conducted trial burn(s) including:

(I) Sampling and analysis techniques used to calculate performance standards in WAC 173-303-670(4); and

(II) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement);

(F) The expected incinerator operation information to demonstrate compliance with WAC 173-303-670 (4) and (6), including:

(I) Expected carbon monoxide (CO) level in the stack exhaust gas;

(II) Waste feed rate;

(III) Combustion zone temperature;

(IV) Indication of combustion gas velocity;

(V) Expected stack gas volume, flow rate, and temperature;

(VI) Computed residence time for waste in the combustion zone;

(VII) Expected hydrochloric acid removal efficiency;

(VIII) Expected fugitive emissions and their control procedures; and

(IX) Proposed waste feed cutoff limits based on the identified significant operating parameters;

(G) Such supplemental information as the department finds necessary to achieve the purposes of this subsection;

(H) Waste analysis data, including that submitted in (f)(iii)(A) of this subsection, sufficient to allow the department to specify as permit principal organic dangerous constituents (permit PODC's) those constituents for which destruction and removal efficiencies will be required; and

(I) Test protocols and sampling and analytical data to demonstrate the designation status under WAC 173-303-070 of:

(I) Incinerator ash residues, if any; and

(II) Residues from the air pollution control devices.

(iv) The department will approve a permit application without a trial burn if the department finds that:

(A) The wastes are sufficiently similar; and

(B) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under WAC 173-303-670(6)) operating conditions that will ensure that the performance standards in WAC 173-303-670(4) will be met by the incinerator.

(g) Specific Part B information requirements for land treatment facilities. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that use land treatment to dispose of dangerous waste must provide the following additional information:

(i) A description of plans to conduct a treatment demonstration as required under WAC 173-303-655(3). The description must include the following information:

(A) The wastes for which the demonstration will be made and the potential dangerous constituents in the waste;

(B) The data sources to be used to make the demonstration (e.g., literature, laboratory data, field data, or operating data);

(C) Any specific laboratory or field test that will be conducted, including:

(I) The type of test (e.g., column leaching, degradation);

(II) Materials and methods, including analytical procedures;

(III) Expected time for completion; and

(IV) Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices;

(ii) A description of a land treatment program, as required under WAC 173-303-655(2). This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items:

(A) The wastes to be land treated;

(B) Design measures and operating practices necessary to maximize treatment in accordance with WAC 173-303-655 (4)(a) including:

(I) Waste application method and rate;

(II) Measures to control soil pH;

(III) Enhancement of microbial or chemical reactions; and

(IV) Control of moisture content;

(C) Provisions for unsaturated zone monitoring, including:

(I) Sampling equipment, procedures, and frequency;

(II) Procedures for selecting sampling locations;

(III) Analytical procedures;

(IV) Chain of custody control;

(V) Procedures for establishing background values;

(VI) Statistical methods for interpreting results; and

(VII) The justification for any dangerous constituents recommended for selection as principal dangerous constituents, in accordance with the criteria for such selection in WAC 173-303-655 (6)(a);

(D) A list of dangerous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to WAC 173-303-300;

(E) The proposed dimensions of the treatment zone;

(iii) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of WAC 173-303-655(4). This submission must address the following items:

(A) Control of run-on;

(B) Collection and control of run-off;

(C) Minimization of run-off of dangerous constituents from the treatment zone;

(D) Management of collection and holding facilities associated with run-on and run-off control systems;

(E) Periodic inspection of the unit. This information should be included in the inspection plan submitted under (a)(v) of this subsection; and

(F) Control of wind dispersal of particulate matter, if applicable;

(iv) If food-chain crops are to be grown in or on the treatment zone of the land treatment unit, a description of how the demonstration required under WAC 173-303-655(5) will be conducted including:

(A) Characteristics of the food-chain crop for which the demonstration will be made;

(B) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;

(C) Procedures for crop growth, sample collection, sample analysis, and data evaluation;

(D) Characteristics of the comparison crop including the location and conditions under which it was or will be grown; and

(E) If cadmium is present in the land treated waste, a description of how the requirements of WAC 173-303-655 (5)(b) will be complied with;

(v) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required under WAC 173-303-655 (8)(a)(viii) and (c)(ii). This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under (a)(xiii) of this subsection;

(vi) If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of WAC 173-303-655(9) will be complied with; and

(vii) If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how WAC 173-303-655(10) will be complied with.

(viii) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-655(12).

(h) Specific Part B information requirements for landfills. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that dispose of dangerous waste in landfills must provide the following additional information;

(i) A list of the dangerous wastes placed or to be placed in each landfill or landfill cell;

(ii) Detailed plans and an engineering report describing how the landfill is designed, and is or will be constructed, operated and maintained to comply with the requirements of WAC 173-303-335, 173-303-665(2), (8) and (9) addressing the following items:

(A)(I) The liner system (except for an existing portion of a landfill), if the landfill must meet the requirements of WAC 173-303-665 (2)(a), including the licensed engineer's certification required by WAC 173-303-665 (2)(a)(i). If an exemption from the requirements for a liner and a leachate collection and removal system is sought, as provided by WAC 173-303-665 (2)(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate designs and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituent into the ground water or surface water at any future time;

(II) The double liner and leak (leachate) detection, collection, and removal system, if the landfill must meet the requirements of WAC 173-303-665 (2)(h). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-665 (2)(j), (k) or (l), submit appropriate information;

(III) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(IV) The construction quality assurance (CQA) plan if required under WAC 173-303-335;

(V) Proposed action leakage rate, with rationale, if required under WAC 173-303-665(8), and response action plan, if required under 173-303-665(9);

(B) Control of run-on;

(C) Control of run-off;

(D) Management of collection and holding facilities associated with run-on and run-off control systems; and

(E) Control of wind dispersal of particulate matter, where applicable;

(iii) Reserve.

(iv) A description of how each landfill, including the double liner system, leachate collection and removal system, cover systems, and appurtenances for control for run-on and run-off will be inspected in order to meet the requirements of WAC 173-303-665(4). This information must be included in the inspection plan submitted under (a)(v) of this subsection;

(v) Detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with WAC 173-303-665 (6)(a), and a description of how each landfill will be maintained and monitored after closure in accordance with WAC 173-303-665 (6)(b) and (c). This information should be included in the closure and post-closure plans submitted under (a)(xiii) of this subsection;

(vi) If incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how WAC 173-303-665(7) will be complied with;

(vii) A description of how each landfill will be designed and operated in order to comply with WAC 173-303-140.

(i) Specific Part B information requirements for miscellaneous units. Except as otherwise provided in WAC 173-303-680(1), owners and operators of facilities that treat, store, or dispose of dangerous waste in miscellaneous units must provide the following additional information:

(i) A detailed description of the unit being used or proposed for use, including the following:

(A) Physical characteristics, materials of construction, and dimensions of the unit;

(B) Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of WAC 173-303-680 (2) and (3); and

(C) For disposal units, a detailed description of the plans to comply with the postclosure requirements of WAC 173-303-680(4).

(ii) Detailed hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards of WAC 173-303-680(2). If the applicant can demonstrate that he does not violate the environmental performance standards of WAC 173-303-680(2) and the department agrees with such demonstration, preliminary hydrologic, geologic, and meteorologic assessments will suffice.

(iii) Information on the potential pathways of exposure of humans or environmental receptors to dangerous waste or dangerous constituents and on the potential magnitude and nature of such exposures.

(iv) For any treatment unit, a report on a demonstration of the effectiveness of the treatment based on laboratory or field data.

(v) Any additional information determined by the department to be necessary for evaluation of compliance of the unit with the environmental performance standards of WAC 173-303-680(2).

(j) Specific Part B information requirements for process vents. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that have process vents to which WAC 173-303-690 applies must provide the following additional information:

(i) For facilities that cannot install a closed-vent system and control device to comply with the provisions of WAC 173-303-690 on the effective date that the facility becomes subject to the provisions of WAC 173-303-690 or 40 CFR 265 Subpart AA incorporated by reference at WAC 173-303-400 (3)(a), an implementation schedule as specified in 40 CFR section 264.1033(a)(2).

(ii) Documentation of compliance with the process vent standards in 40 CFR section 264.1032, including:

(A) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the dangerous waste management units on a facility plot plan).

(B) Information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, estimates of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or concentrations) that represent the conditions that exist when the waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(C) Information and data used to determine whether or not a process vent is subject to the requirements of 40 CFR section 264.1032.

(iii) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with the requirements of 40 CFR 264.1032, and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in 40 CFR 264.1035(b)(3).

(iv) Documentation of compliance with 40 CFR 264.1033, including:

(A) A list of all information references and sources used in preparing the documentation.

(B) Records, including the dates, of each compliance test required by 40 CFR 264.1033(k).

(C) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" (WAC 173-303-110 (3)(g)(viii)) or other engineering texts acceptable to the department that present basic control device design information. The design

analysis will address the vent stream characteristics and control device operation parameters as specified in 40 CFR 264.1035(b)(4)(iii).

(D) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the dangerous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(E) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater unless the total organic emission limits of 40 CFR 264.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.

(k) Specific Part B information requirements for equipment leaks. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that have equipment to which WAC 173-303-691 applies must provide the following additional information:

(i) For each piece of equipment to which WAC 173-303-691 applies:

(A) Equipment identification number and dangerous waste management unit identification.

(B) Approximate locations within the facility (e.g., identify the dangerous waste management unit on a facility plot plan).

(C) Type of equipment (e.g., a pump or pipeline valve).

(D) Percent by weight total organics in the hazardous waste stream at the equipment.

(E) Hazardous waste state at the equipment (e.g., gas/vapor or liquid).

(F) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").

(ii) For facilities that cannot install a closed-vent system and control device to comply with the provisions of WAC 173-303-691 on the effective date that the facility becomes subject to the provisions of WAC 173-303-691 or 40 CFR Part 265 Subpart BB incorporated by reference at WAC 173-303-400 (3)(a), an implementation schedule as specified in 40 CFR 264.1033(a)(2).

(iii) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in 40 CFR section 264.1035(b)(3).

(iv) Documentation that demonstrates compliance with the equipment standards in 40 CFR sections 264.1052 to 264.1059. This documentation will contain the records required under 40 CFR 264.1064. The department may request further documentation before deciding if compliance has been demonstrated.

(v) Documentation to demonstrate compliance with 40 CFR section 264.1060 will include the following information:

(A) A list of all information references and sources used in preparing the documentation.

(B) Records, including the dates, of each compliance test required by 40 CFR 264.1033(j).

(C) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "ATPI Course 415: Control of Gaseous Emissions" (incorporated by reference as specified in WAC 173-303-110 (3)(g)(viii)) or other engineering texts acceptable to the department that present basic control device design information. The design analysis will address the vent stream characteristics and control device operation parameters as specified in 40 CFR 264.1035(b)(4)(iii).

(D) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the dangerous waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(E) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater.

(l) Special Part B information requirements for drip pads.

Except as otherwise provided by WAC 173-303-600(3), owners and operators of dangerous waste treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads must provide the following additional information:

(i) A list of hazardous wastes placed or to be placed on each drip pad.

(ii) If an exemption is sought to WAC 173-303-645, as provided by WAC 173-303-645(1), detailed plans and an engineering report describing how the requirements of WAC 173-303-645 (1)(b) will be met.

(iii) Detailed plans and an engineering report describing how the drip pad is or will be designed, constructed, operated and maintained to meet the requirements of WAC 173-303-675(4), including the as-built drawings and specifications. This submission must address the following items as specified in WAC 173-303-675(2):

(A) The design characteristics of the drip pad;

(B) The liner system;

(C) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time;

(D) Practices designed to maintain drip pads;

(E) The associated collection system;

(F) Control of run-on to the drip pad;

(G) Control of run-off from the drip pad;

(H) The interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad;

(I) Procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or other materials, including but not limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning and provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned.

(J) Operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste

constituents off the drip pad due to activities by personnel or equipment is minimized;

(K) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and nonpressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices;

(L) Provisions for ensuring that collection and holding units associated with the run-on and run-off control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system;

(M) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals.

(N) A description of how each drip pad, including appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of WAC 173-303-675(4). This information should be included in the inspection plan submitted under (a)(v) of this subsection.

(O) A certification signed by an independent qualified, registered professional engineer, stating that the drip pad design meets the requirements of WAC 173-303-675 (4)(a) through (f).

(P) A description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under WAC 173-303-675 (6)(a). For any waste not to be removed from the drip pad upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-665(6) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection.

(5) Construction. A person may begin physical construction of a new facility, or of new portions of an existing facility if the new portions would amount to reconstruction under interim status (WAC 173-303-805(7)), only after complying with WAC 173-303-281, submitting Part A and Part B of the permit application and receiving a final facility permit. All permit applications must be submitted at least one hundred eighty days before physical construction is expected to begin.

(6) Reapplications. Any dangerous waste facility with an effective final facility permit must submit a new application one hundred eighty days prior to the expiration date of the effective permit, unless the department grants a later date provided that such date will never be later than the expiration date of the effective permit.

(7) Continuation of expiring permits.

(a) When the owner/operator submits a timely application for a final facility permit and the application is determined by the department to be complete pursuant to subsection (8) of this section, the facility is allowed to continue operating under the expiring or expired permit until the effective date of the new permit.

(b) When the facility is not in compliance with the conditions of the expiring or expired permit, the department may choose to do any of the following:

(i) Initiate enforcement action based upon the permit which has been continued;

(ii) Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(iii) Issue a new permit with appropriate conditions; and/or

(iv) Take other actions authorized by this chapter.

(8) Completeness. The department will not issue a final facility permit before receiving a complete application, except for permits by rule or emergency permits. An application for a permit is complete when the application form and any supplemental information has been submitted to the department's satisfaction. The completeness of any application for a permit will be judged independently of the status of any other permit application or permit for the same facility or activity. The department may deny a permit for the active life of a dangerous waste management facility or unit before receiving a complete application for a permit.

(9) Recordkeeping. Applicants must keep records of all data used to complete the permit applications, and any supplemental information submitted to the department for a period of at least three years from the date the application is signed.

(10) General permit conditions. All final facility permits will contain general permit conditions described in WAC 173-303-810.

(11) Permit duration.

(a) Final facility permits will be effective for a fixed term not to exceed ten years.

(b) The department may issue any final facility permit for a duration that is less than the full allowable term.

(c) The term of a final facility permit will not be extended beyond ten years, unless otherwise authorized under subsection (7) of this section.

(d) Each permit for a land disposal facility may 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.

(12) Grounds for termination. The following are causes for terminating a final facility permit during its term:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

(c) A determination that the permitted activity endangers public health or the environment and the hazard can only be controlled by permit modification or termination.

(13) Grounds for denial. A permit application will be denied pursuant to the procedures in WAC 173-303-840 if it is determined that the proposed location and/or activity endangers public health and the environment as demonstrated by the permit applicant's failure to satisfy the performance standards of WAC 173-303-283.

(14) Permit changes. All final facility permits will be subject to the requirements of permit changes, WAC 173-303-830.

(15) Procedures for decision making. Issuance of final facility permits will be subject to the procedures for decision making described in WAC 173-303-840.

(16) Other requirements for final recycling facility permits. In lieu of issuing a final recycling facility permit,

the department may, after providing opportunity for public comment in accordance with WAC 173-303-840, defer to a permit already issued under other statutory authority administered by the department (such as the State Water Pollution Control Act, chapter 90.48 RCW, the State Clean Air Act, chapter 70.94 RCW, etc.) which incorporates the requirements of this section, and WAC 173-303-500 through 173-303-525 for recycling facilities.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-806, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-806, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-806, filed 3/7/91, effective 4/7/91. Statutory Authority: RCW 43.21A.080 and 70.105.210 et seq. 90-20-016, § 173-303-806, filed 9/21/90, effective 10/22/90. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-806, filed 1/4/89; 88-18-083 (Order 88-29), § 173-303-806, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-806, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-806, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-806, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-806, filed 4/18/84.]

WAC 173-303-807 Trial burns for dangerous waste incinerator final facility permits. (1) Purpose and applicability. For purposes of determining operational readiness and establishing conditions in final facility permits for dangerous waste incinerators, the department may approve trial burns. Trial burns may not exceed seven hundred twenty hours operating time, except that the department may extend the duration of this operational period once, up to seven hundred twenty additional hours, at the request of the owner/operator of the incinerator when good cause is shown. The permit may be modified to reflect the extension according to WAC 173-303-830(4). The procedures for requesting and approving trial burns are described in:

(a) Subsection (10) of this section for existing incinerators with interim status permits; and

(b) Subsection (11) 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, or their equivalent;

(iv) An approximate quantification of the dangerous constituents identified in the waste, within the precision produced by the analytical methods specified or referenced in WAC 173-303-110; and

(v) A quantification of those dangerous constituents in the waste which may be designated as principal organic dangerous constituents (PODC) based on data submitted from other trial or operational burns which demonstrate compliance with the performance standard in WAC 173-303-670(4);

(b) A detailed engineering description of the incinerator for which the trial burn permit is sought including:

(i) Manufacturer's name and model number of incinerator (if available);

(ii) Type of incinerator;

(iii) Linear dimensions of the incinerator unit including the cross sectional area of the combustion chamber;

(iv) Description of the auxiliary fuel system (type/feed);

(v) Capacity of the prime air mover;

(vi) Description of automatic waste feed cutoff system(s);

(vii) Stack gas monitoring and pollution control equipment;

(viii) Nozzle and burner design;

(ix) Construction materials; and

(x) Location and description of temperature, pressure, and flow indicating and control devices;

(c) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;

(d) A detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the department's decision under subsection (5) of this section;

(e) A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, air feed rate, use of auxiliary fuel, and other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator;

(f) A description of, and planned operating conditions for, any emission control equipment which will be used;

(g) Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction;

(h) A detailed test protocol to sample and analyze the following for designation under WAC 173-303-070:

(i) Any incinerator ash residue collected in the incinerator; and

(ii) Any residues collected in the air pollution control devices; and

(i) Such other information as the department reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this section.

(3) Additional information required. The department, in reviewing the trial burn plan, will evaluate the adequacy of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this section.

(4) Trial PODCs. Based on the waste analysis data in the trial burn plan, the department will specify as trial principal organic dangerous constituents (trial PODCs) those constituents for which destruction and removal efficiencies

must be calculated during the trial burn. These trial PODCs will be specified by the department based on its estimate of the difficulty of incineration of the constituents identified in the waste analysis, the concentration or mass in the waste feed, and the dangerous waste constituent or constituents identified in WAC 173-303-9905, or identified as causing the waste to be regulated as a dangerous waste.

(5) Approval of the plan. The department will approve a trial burn plan if it finds that:

(a) The trial burn is likely to determine whether the incinerator performance standard required by WAC 173-303-670(4) can be met;

(b) The trial burn itself will not present an imminent hazard to public health or the environment;

(c) The trial burn will help the department to determine operating requirements to be specified under WAC 173-303-670(6); and

(d) The information sought in (a), (b), and (c) of this subsection cannot reasonably be developed through other means.

(6) Trial burns. During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:

(a) A quantitative analysis of the trial PODCs in the waste feed to the incinerator;

(b) A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial PODCs, O_2, hydrogen chloride (HCl), carbon monoxide (CO) and dangerous combustion byproducts, including the total mass emission rate of byproducts as a percent of the total mass feed rate of PODCs fed to the incinerator;

(c) A quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial PODCs and whether they are designated according to WAC 173-303-070;

(d) A total mass balance of the trial PODCs in the waste;

(e) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in WAC 173-303-670 (4)(a);

(f) If the HCl emission rate exceeds 1.8 kilograms of HCl per hour (4 pounds per hour), a computation of HCl removal efficiency in accordance with WAC 173-303-670 (4)(c)(i);

(g) A computation of particulate emissions, in accordance with WAC 173-303-670 (4)(c)(ii);

(h) An identification of sources of fugitive emissions and their means of control;

(i) A measurement of average, maximum, and minimum temperatures, and combustion gas velocity;

(j) A continuous measurement of carbon monoxide in the exhaust gas;

(k) An identification of any existing air emission standards where a state or local air pollution control authority has established emission standards and such standards are applicable to the incinerator; and

(l) Such other information as the department may specify as necessary to ensure that the trial burn will determine compliance with the performance standard of WAC 173-303-670(4), and to establish the operating conditions required by WAC 173-303-670(6).

(7) 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 (6) 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.

(8) Submission of data. All data collected during any trial burn must be submitted to the department following the completion of the trial burn.

(9) 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).

(10) 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 (9) 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 (6) of this section, with Part B of the permit application. If completion of this process conflicts with the date set for submission of Part B of the final facility permit application, the owner/operator must contact the department to extend the date for submitting the Part B or the trial burn results. If the applicant submits a trial burn plan with Part B of the final facility permit application, the department will specify in the notice of interim status modification issued under (b) of this subsection, a time period for conducting the trial burn and submitting the results. Trial burn results must be submitted prior to the issuance of the permit.

(11) 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.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-807, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-807, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-807, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-807, filed 4/18/84.]

WAC 173-303-808 Demonstrations for dangerous waste land treatment final facility permits. (1) Purpose and applicability. This section is applicable to the owner/operator of a land treatment facility who must demonstrate that his proposed treatment will be successful. The purpose of this section is to allow the department to issue a land treatment demonstration permit.

(2) Permit issuance. The department may issue a land treatment demonstration permit either in advance of or as part of a final facility permit so that the owner/operator of a land treatment facility can make the demonstration required in WAC 173-303-655(3). If issued in advance of the final facility permit, the land treatment demonstration permit will be issued as described in subsection (3) of this section, as a demonstration permit only. If issued as part of the final facility permit, the land treatment demonstration and final facility permit will be issued as described in subsection (4) of this section, as a phased permit. The determination for which procedure to follow will be made by the department based on the information submitted by the owner/operator in Part B of the final facility permit application.

(3) Demonstration permit only.

(a) If the department finds that the Part B does not contain enough information regarding the proposed treatment to allow the department to establish permit conditions necessary for compliance with all requirements of WAC 173-303-655, it may issue a land treatment demonstration permit only. The demonstration permit will be issued in accordance with the decision-making procedures of WAC 173-303-840. The demonstration permit may be issued either as a treatment or disposal permit, will cover only the field test or laboratory analyses, will contain only those requirements necessary to meet the standards in WAC 173-303-655(3), and will provide a specific time period for the demonstration. The department may extend the demonstration period as a modification (or minor modification, if applicable) to the demonstration permit.

(b) Within thirty days (unless the department approves a later date) of the end of the treatment demonstration, the owner/operator must submit a revised Part B to the department containing the results of the field tests or laboratory analyses and all data developed during the demonstration period. The department will then use the information and Part B to determine whether or not there is adequate information to issue a final facility permit which will incorporate conditions sufficient to provide compliance with all requirements of WAC 173-303-655. If the information is adequate, the department will proceed under WAC 173-303-806 to issue a final facility permit. If the information is not adequate, the department may, as the situation warrants, either issue a modification to the demonstration permit in accordance with the procedures of subsection (3)(a) of this section, or deny the final facility permit application.

(4) Phased permit.

(a) The department may issue a two-phase final facility permit if it finds that, based on information submitted in Part B of the permit application, substantial (although incomplete and inconclusive) information exists upon which to base the issuance of a final facility permit. The phased permit will be issued in the same manner as a final facility permit under WAC 173-303-806, except that it will contain a first phase for making a land treatment demonstration, and a second phase (to become effective after completion of the first phase) for establishing conditions for operation of the land treatment facility.

(b) If the department finds that a phased permit may be issued, it will establish, as requirements in the first phase of the facility permit, conditions for conducting the field tests or laboratory analyses. These permit conditions will include design and operating parameters (including the duration of the tests or analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone), monitoring procedures, post-demonstration cleanup activities, and any other conditions which the department finds may be necessary under WAC 173-303-655 (3)(c). The department will include conditions in the second phase of the facility permit to attempt to meet all WAC 173-303-655 requirements pertaining to unit design, construction, operation, and maintenance. The department will establish these conditions in the second phase of the permit based upon the substantial but incomplete or inconclusive information contained in the Part B application.

(i) The first phase of the permit will be effective as provided in WAC 173-303-840 (8)(b).

(ii) The second phase of the permit will be effective as provided in (d) of this subsection.

(c) When the owner or operator who has been issued a two-phase permit has completed the treatment demonstration, he must submit to the department a certification, signed by a person authorized to sign a permit application or report under WAC 173-303-810(12), that the field tests or 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 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 which:

(i) Become effective by statute;

(ii) Are promulgated under 40 CFR Part 268 restricting the placement of dangerous waste in or on the land; or

(iii) Are promulgated under WAC 173-303-650 through 173-303-665 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, CQA programs, monitoring, action leakage rates, and response action plans, and will be implemented through the procedures of WAC 173-303-830 Class *1 permit modifications.

(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) All permits will specify:

(i) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods; and

(ii) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring.

(b) Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

(c) The permittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the department at any time.

(d) Records of monitoring information must include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(e) The permittee must maintain all records of ground water quality and ground water surface elevations for the active life of the facility, and for the post-closure period as well.

(12) Signatory requirement. All applications, reports, or information submitted to the department must be signed in accordance with this subsection and must be certified according to subsection (13) of this section.

(a) Applications. When a dangerous waste facility is owned by one person, but is operated by another person, then the operator will be the permit applicant and responsible for developing the permit application and all accompanying materials, except that the owner must also sign and certify the permit application. Permit applications must be signed as follows:

(i) For a corporation: By a responsible corporate officer. For the purposes of this subsection, a responsible corporate officer means:

(A) A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(B) The manager of one or more manufacturing, production or operating facilities employing more than two hundred fifty persons or having gross annual sales or expenditures exceeding twenty-five million dollars (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(ii) For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

(iii) For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes:

(A) The chief executive officer of the agency; or

(B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(b) Reports. All reports required by permits and other information requested by the department must be signed by a person described in (a) of this subsection, or by a duly

authorized representative of that person. A person is a duly authorized representative only if:

(i) The authorization is made in writing by a person described in (a) of this subsection;

(ii) The authorization specifies either an individual or a position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(iii) The written authorization is submitted to the department.

(c) Changes to authorization. If an authorization under (b) of this subsection is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) of this subsection must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

(13) Certification.

(a) Except as provided in (b) of this subsection, any person signing the documents required under (a) or (b) of subsection (12) of this section must make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(b) When a dangerous waste facility is owned by one person, but is operated by another person, then the permit application must be certified as follows:

(i) The operator must make the certification described under (a) of this subsection; and

(ii) The owner must make the following certification:

"I certify under penalty of law that I own the real property described in, and am aware of the contents of, this permit application, and that I have received a copy of this application. As owner of the real property, I understand that I am responsible for complying with any requirements of chapter 173-303 WAC with which only I am able to comply, and that there are significant penalties for failure to comply with such requirements."

(14) Reporting. The following reports must be provided:

(a) Planned changes. The permittee must give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. For a new TSD facility and for a facility being modified, the permittee may not treat, store, or dispose of dangerous waste in the new or modified portion of the facility until:

(i) The permittee has submitted to the department by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit;

(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.) and either

(ii) The department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or

(iii) Within fifteen days of the date of submission of the letter, the permittee has not received notice from the department of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of dangerous waste.

(b) Anticipated noncompliance. The permittee must give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee may not treat, store, or dispose of dangerous waste; and for a facility being modified, the permittee may not treat, store, or dispose of dangerous waste in the modified portion of the facility except as provided in WAC 173-303-830(4).

(c) Transfers. The permit is not transferable to any person except after notice to the department. The department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.

(d) Monitoring reports. Monitoring results (including monitoring of the facility's impacts as required by the applicable sections of this chapter) must be reported at the intervals specified elsewhere in the permit.

(e) Compliance schedules. Reports of permit compliance or noncompliance or any progress reports on interim and final permit requirements contained in any compliance schedule must be submitted no later than fourteen days following each scheduled date.

(f) Immediate reporting. The permittee must immediately report any noncompliance which may endanger health or the environment. Information must be provided orally to the department as soon as the permittee becomes aware of the circumstances. A written submission must also be provided within five days of the time the permittee becomes aware of the circumstances provided that the department may waive the written submission requirement in favor of a written report, to be submitted within fifteen days. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Information which must be reported immediately must include:

(i) Release of dangerous waste that may cause an endangerment to drinking water supplies or ground or surface waters;

(ii) Any information of a release or discharge of dangerous waste, fire, or explosion from the permitted

facility which could threaten the environment or human health outside the facility;

(iii) The following description of any such occurrence:

(A) Name, address, and telephone number of the owner or operator;

(B) Name, address, and telephone number of the facility;

(C) Date, time, and type of incident;

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

(E) The extent of injuries, if any;

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

(G) Estimated quantity and disposition of recovered material that resulted from the incident.

(g) Other noncompliance. The permittee must report all instances of noncompliance not reported under (d), (e), and (f) of this subsection, at the time monitoring reports are submitted. The reports shall contain the information listed in (f) of this subsection.

(h) Other information. Where the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the department, he must promptly submit this information.

(i) Other reports. In addition, the following reports are required when appropriate:

(i) Manifest discrepancy report as required by WAC 173-303-370(4);

(ii) Unmanifested waste report as required by WAC 173-303-390(1); and

(iii) Annual report as required by WAC 173-303-390(2).

(15) Confidentiality.

(a) Information submitted by the owner/operator of a facility identified as confidential will be treated in accordance with chapter 42.17 RCW and RCW 43.21A.160.

(b) Proprietary information can be held confidential if:

(i) The processes are unique to the owner/operator's business or the owner/operator's competitive position may be adversely affected if the information is released to the public or to a competitor; and

(ii) The director determines that granting the owner/operator's request is not detrimental to the public interest and is in accord with the policies and purposes of chapter 43.21A RCW.

(c) Claims of confidentiality for permit application information must be substantiated at the time the application is submitted and in the manner prescribed in the application instructions. Claims of confidentiality for the name and address of any permit applicant will be denied.

(d) If a submitter does not provide substantiation, the department will notify the owner/operator by certified mail of the requirement to do so. If the department does not receive the substantiation within ten days after the submitter receives the notice, the department will place the unsubstantiated information in the public file.

(e) The department will determine if the owner/operator's request meets the confidential information criteria.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 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 173-303-830 Permit changes. (1) Purpose and applicability. This section describes the types of permit changes that may be made to all permits issued by the department. This section does not apply to permits by rule or interim status permits.

(2) Transfer of permits.

(a) 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 department 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 department. 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 department by the new owner or operator of compliance with the financial requirements, the department 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 department 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 department may determine whether or not one or more of the causes listed in (a) and (b) of this subsection for modification or revocation and reissuance or both exist. If cause exists, the department may modify or revoke and reissue the permit accordingly, 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. 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. If cause does not exist under this subsection, the department 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 department 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, unless agreed to or requested by the permittee:

(i) Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;

(ii) Information. Permits may be modified during their terms if the department receives information that was not available at the time of permit issuance and which would have justified the application of different permit conditions at the time of issuance;

(iii) New statutory requirements or regulations. The standards or regulations on which the permit was based have been changed by statute, through promulgation of new or amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause as follows:

(A) The department may modify the permit when the standards or regulations on which the permit was based have been changed by statute or amended standards or regulations.

(B) Permittee may request modification when:

(I) The permit condition requested to be modified was based on an effective regulation; and

(II) The department has revised, withdrawn, or modified that portion of the regulation on which the permit condition was based; and either

a. The department decides to modify the permit because there would be a potential threat to public health or the environment if the permit does not incorporate the requirements of the amended regulation; or

b. A permittee requests modification within ninety days after the date the regulation amendments are adopted;

(iv) Compliance schedules. The department determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage, or other events over which the permittee has little or no control and for which there is no reasonably available remedy;

(v) Closure plans or postclosure. When modification of a closure or postclosure plan is required under WAC 173-303-610 (3) or (8);

(vi) Revocation of changes approved prior to notice of closure. After the department receives the notification of expected closure under WAC 173-303-610(3), the department may determine that previously approved changes are no longer warranted. These include:

(A) Extension of the ninety or one hundred eighty day periods under WAC 173-303-610(4);

(B) Modification of the thirty year postclosure period under WAC 173-303-610(7);

(C) Continuation of security requirements under WAC 173-303-610(7); or

(D) Permission to disturb the integrity of the containment system under WAC 173-303-610(7);

(vii) When the permittee has filed a request under WAC 173-303-620 for a variance to the level of financial responsibility or when the department demonstrates under WAC 173-303-620 that an upward adjustment of the level of financial responsibility is required;

(viii) When the corrective action program specified in the permit under WAC 173-303-645 has not brought the regulated unit into compliance with the ground water protection standard within a reasonable period of time;

(ix) To include a detection monitoring program meeting the requirements of WAC 173-303-645, when the owner or operator has been conducting a compliance monitoring program under WAC 173-303-645 or a corrective action program under WAC 173-303-645 and compliance period ends before the end of the postclosure care period for the unit;

(x) When a permit requires a compliance monitoring program under WAC 173-303-645, but monitoring data collected prior to permit issuance indicate that the facility is exceeding the ground water protection standard;

(xi) To include conditions applicable to units at a facility that were not previously included in the facility's permit;

(xii) When a land treatment unit is not achieving complete treatment of dangerous constituents under its current permit conditions; or

(xiii) Notwithstanding any other provision in this section, when a permit for a land disposal facility is reviewed by the department under 173-303-806 (11)(d), the department 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 173-303-806(12) for final facility permits, and the department determines that modification or revocation and reissuance is appropriate; or

(ii) The department has received notification of a proposed transfer of the permit.

(c) Facility siting. Suitability of the facility location will not be considered at the time of permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of permit issuance.

(4) 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 department 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 department 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 department approval, the notification must be made within ninety calendar days after the department approves the request.

(C) Any person may request the department to review, and the department may for cause reject, any Class 1 modification. The department must inform the permittee by certified mail that a Class 1 modification has been rejected, explaining the reasons for the rejection. If a Class 1 modification has been rejected, the permittee must comply with the original permit conditions.

(ii) Class 1 permit modifications identified in Appendix I by an asterisk may be made only with the prior written approval of the department.

(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 department 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 department 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 department 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 department evidence of the mailing and publication. The notice must include:

(A) Announcement of a sixty-day comment period, in accordance with (b)(v) of this subsection, and the name and address of a departmental contact to whom comments must be sent;

(B) Announcement of the date, time, and place for a public meeting held in accordance with (b)(iv) of this subsection;

(C) Name and telephone number of the permittee's contact person;

(D) Name and telephone number of a departmental contact person;

(E) Location where copies of the modification request and any supporting documents can be viewed and copied; and

(F) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the department of ecology contact person."

(iii) The permittee must place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

(iv) The permittee must hold a public meeting no earlier than fifteen days after the publication of the notice required in (b)(ii) of this subsection and no later than fifteen days before the close of the sixty-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

(v) The public will be provided sixty days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the department of ecology contact identified in the public notice.

(vi)(A) No later than ninety days after receipt of the notification request, the department 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 department notifies the permittee of a thirty-day extension for a decision, the department 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 department 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 department approves, with or without changes, or denies the modification request during the term of the temporary or automatic authorization provid-

ed 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 department 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 department 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 department 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 department 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 department 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 department may deny or change the terms of a Class 2 permit modification request under (b)(6)(i) through (iii) of this subsection for the following reasons:

(A) The modification request is incomplete;

(B) The requested modification does not comply with the appropriate requirements of WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680 or other applicable requirements; or

(C) The conditions of the modification fail to protect human health and the environment.

(viii) The permittee may perform any construction associated with a Class 2 permit modification request beginning sixty days after the submission of the request unless the department 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 department that:

(A) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

(B) Identifies that the modification is a Class 3 modification;

(C) Explains why the modification is needed; and

(D) Provides the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(ii) The permittee must send a notice of the modification request to all persons on the facility mailing list maintained by the department 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 department 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 department must grant or deny the permit modification request according to the permit modification procedures of WAC 173-303-840. In addition, the department 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 department 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 department 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 department 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 department 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 department 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 department 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 department will approve or deny the temporary authorization as quickly as practical. To issue a temporary authorization, the department must find:

(A) The authorized activities are in compliance with the standards of WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680.

(B) The temporary authorization is necessary to achieve one of the following objectives before action is likely to be taken on a modification request:

(I) To facilitate timely implementation of closure or corrective action activities;

(II) To allow treatment or storage in tanks, containers, or in containment buildings in accordance with 40 CFR Part 268;

(III) To prevent disruption of ongoing waste management activities;

(IV) To enable the permittee to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or

(V) To facilitate other changes to protect human health and the environment.

(iv) A temporary authorization may be reissued for one additional term of up to one hundred eighty days provided that the permittee has requested a Class 2 or 3 permit modification for the activity covered in the temporary authorization, and:

(A) The reissued temporary authorization constitutes the department's decision on a Class 2 permit modification in accordance with (b)(vi)(A)(IV) or (B)(IV) of this subsection; or

(B) The department 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 department 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 department 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 department's decision to grant or deny a Class 2 or 3 permit modification request under this section may be appealed under the permit appeal procedures of WAC 173-303-845.

(iii) An automatic authorization that goes into effect under (b)(vi)(C) or (E) of this subsection may be appealed under the permit appeal procedures of WAC 173-303-845; however, the permittee may continue to conduct the activities pursuant to the automatic authorization until the appeal has been granted pursuant to WAC 173-303-845, notwithstanding the provisions of WAC 173-303-840 (8)(b).

(g) Newly regulated wastes and units.

(i) The permittee is authorized to continue to manage wastes listed or identified as dangerous under WAC 173-303-070, or to continue to manage dangerous waste in units newly regulated as dangerous waste management units, if:

(A) The unit was in existence as a dangerous waste facility with respect to the newly listed or identified waste or newly regulated waste management unit on the effective date of the final rule listing or identifying the waste, or regulating the unit;

(B) The permittee submits a Class 1 modification request on or before the date on which the waste or unit becomes subject to the new requirements;

(C) The permittee is in compliance with the applicable standards of 40 CFR Part 265 (as referenced in WAC 173-303-400) and Part 266 (as referenced in WAC 173-303-510);

(D) The permittee also submits a complete Class 2 or 3 permit modification request within one hundred eighty days of the effective date of the rule listing or identifying the waste, or subjecting the unit to management standards under this chapter; and

(E) In the case of land disposal units, the permittee certifies that each such unit is in compliance with all applicable requirements of 40 CFR Part 265 for ground water monitoring and financial responsibility (as referenced in WAC 173-303-400) on the date twelve months after the effective date of the rule identifying or listing the waste as dangerous, or regulating the unit as a dangerous waste management unit. If the owner or operator fails to certify compliance with all these requirements, he or she will lose authority to operate under this section.

(ii) New wastes or units added to a facility's permit under this subsection do not constitute expansions for the purpose of the twenty-five percent capacity expansion limit for Class 2 modifications.

(h) Permit modification list. The department must maintain a list of all approved permit modifications and must publish a notice once a year in a state-wide newspaper that an updated list is available for review.

APPENDIX I

Modifications

Class

A. General Permit Provisions

1. Administrative and informational changes 1

2. Correction of typographical errors 1

3. Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls) 1

4. Changes in the frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee:

a. To provide for more frequent monitoring, reporting, sampling, or maintenance 1

b. Other changes 2

5. Schedule of compliance:

a. Changes in interim compliance dates, with prior approval of the director . . . . . [1]1

b. Extension of final compliance date 3

6. Changes in expiration date of permit to allow earlier permit termination, with prior approval of the director . . . . . [1]1

7. Changes in ownership or operational control of a facility, provided the procedures of subsection (2)(b) of this section are followed . . . . . [1]1

B. General Facility Standards

1. Changes to waste sampling or analysis methods:

a. To conform with agency guidance or regulations 1

b. To incorporate changes associated with F039 (multisource leachate) sampling or analysis methods . . . . . [1]1

c. To incorporate changes associated with underlying dangerous constituents in ignitable or corrosive wastes . [1]1

d. Other changes 2

2. Changes to analytical quality assurance/control plan:

a. To conform with agency guidance or regulations 1

b. Other changes 2

3. Changes in procedures for maintaining the operating record 1

4. Changes in frequency or content of inspection schedules 2

5. Changes in the training plan:

a. That affect the type or decrease the amount of training given to employees 2

b. Other changes 1

6. Contingency plan:

a. Changes in emergency procedures (i.e., spill or release response procedures) 2

b. Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed 1

c. Removal of equipment from emergency equipment list 2

d. Changes in name, address, or phone number of coordinators or other persons or agencies identified in the plan 1

7. Construction quality assurance plan:

a. Changes that the CQA officer certifies in the operating record will provide equivalent or better certainty that the unit components meet the design specification 1

b. Other changes 2

Note: When a permit modification (such as introduction of a new unit) requires a change in facility plans or other general facility standards, that change will be reviewed under the same procedures as the permit modification.

C. Ground Water Protection

1. Changes to wells:

a. Changes in the number, location, depth, or design of upgradient or downgradient wells of permitted ground water monitoring system 2

b. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well 1

2. Changes in ground water sampling or analysis procedures or monitoring schedule, with prior approval of the director . . . . . [1]1

3. Changes in statistical procedure for determining whether a statistically significant change in ground water quality between upgradient and downgradient wells has occurred, with prior approval of the director . . . . . [1]1

4. Changes in point of compliance . . . . . [1]2

5. Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs):

a. As specified in the ground water protection standard 3

b. As specified in the detection monitoring program 2

6. Changes to a detection monitoring program as required by WAC 173-303-645 (9)(j), unless otherwise specified in this appendix 2

7. Compliance monitoring program:

a. Addition of compliance monitoring program as required by WAC 173-303-645 (9)(h)(iv) and (10) 3

b. Changes to a compliance monitoring program as required by WAC 173-303-645 (10)(k), unless otherwise specified in this appendix 2

8. Corrective action program:

a. Addition of a corrective action program as required by WAC 173-303-645 (10)(i)(ii) and (11) 3

b. Changes to a corrective action program as required by WAC 173-303-645 (11)(h), unless otherwise specified in this appendix 2

D. Closure

1. Changes to the closure plan:

a. Changes in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility, with prior approval of the director . . . . . [1]1

b. Changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period, with prior approval of the director . . . . . [1]1

c. Changes in the expected year of final closure, where other permit conditions are not changed, with prior approval of the director . . . . . [1]1

d. Changes in procedures for decontamination of facility equipment or structures, with prior approval of the director[1]

e. Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this appendix 2

f. Extension of the closure period to allow a landfill, surface impoundment, or land treatment unit to receive nondangerous wastes after final receipt of dangerous wastes under WAC 173-303-610 (4)(d) and (e) 2

2. Creation of a new landfill unit as part of closure 3

3. Addition of the following new units to be used temporarily for closure activities:

a. Surface impoundments 3

b. Incinerators 3

c. Waste piles that do not comply with WAC 173-303-660 (1)(c) 3

d. Waste piles that comply with WAC 173-303-660 (1)(c) 2

e. Tanks or containers (other than specified below) 2

f. Tanks used for neutralization, dewatering, phase separation, or component separation, with prior approval of the director . . . . . [1]1

E. Post-Closure

1. Changes in name, address, or phone number of contact in post-closure plan 1

2. Extension of post-closure care period 2

3. Reduction in the post-closure care period 3

4. Changes to the expected year of final closure, where other permit conditions are not changed 1

5. Changes in post-closure plan necessitated by events occurring during the active life of the facility, including partial and final closure 2

F. Containers

1. Modification or addition of container units:

a. Resulting in greater than 25% increase in the facility's container storage capacity, except as provided in F (1)(c) and F (4)(a) below 3

b. Resulting in up to 25% increase in the facility's container storage capacity, except as provided in F (1)(c) and F (4)(a) below 2

c. Or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), with prior approval of the department. This modification may also involve addition of new waste codes or narrative descriptions of wastes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) . . . . . [1]1

2:

a. Modification of a container unit without increasing the capacity of the unit 2

b. Addition of a roof to a container unit without alteration of the containment system 1

3. Storage of different wastes in containers:

a. That require additional or different management practices from those authorized in the permit, except as provided in F(4) below 3

b. That do not require additional or different management practices from those authorized in the permit 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

4. Storage of treatment of different wastes in containers:

a. That require addition of units or change in treatment process or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

b. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) . . . . . [1]1

G. Tanks

1:

a. Modification or addition of tank units resulting in greater than 25% increase in the facility's tank capacity, except as provided in G (1)(c), G (1)(d), and G (1)(e) below 3

b. Modification or addition of tank units resulting in up to 25% increase in the facility's tank capacity, except as provided in G (1)(d) and G (1)(e) below 2

c. Addition of a new tank that will operate for more than 90 days using any of the following physical or chemical

treatment technologies: neutralization, dewatering, phase separation, or component separation 2

d. After prior approval of the department, addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation . . . . . [1]1

e. Modification or addition of tank units or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), with prior approval of the department. This modification may also involve addition of new waste codes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) . . . . . [1]1

2. Modification of a tank unit or secondary containment system without increasing the capacity of the unit 2

3. Replacement of a tank with a tank that meets the same design standards and has a capacity within +/- 10% of the replaced tank provided 1

-The capacity difference is no more than 1500 gallons,

-The facility's permitted tank capacity is not increased, and

-The replacement tank meets the same conditions in the permit.

4. Modification of a tank management practice . . . 2

5. Management of different wastes in tanks:

a. That require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process from that authorized in the permit, except as provided in G (5)(c) below 3

b. That do not require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process than authorized in the permit, except as provided in G (5)(d) 2

c. That require addition of units or change in treatment processes or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii). The modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) . . . . . [1]1

(d) That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received waste of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

H. Surface Impoundments

1. Modification or addition of surface impoundment units that result in increasing the facility's surface impoundment storage or treatment capacity 3

2. Replacement of a surface impoundment unit . . . 3

3. Modification of a surface impoundment unit without increasing the facility's surface impoundment storage or treatment capacity and without modifying the unit's liner, leak detection system, or leachate collection system . . . 2

4. Modification of a surface impoundment management practice 2

5. Treatment, storage, or disposal of different wastes in surface impoundments:

a. That require additional or different management practices or different design of the liner or leak detection system than authorized in the permit 3

b. That do not require additional or different management practices or different design of the liner or leak detection system than authorized in the permit 2

c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), and provided that the unit meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a unit that meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2), and provided further that the surface impoundment has previously received wastes of the same type (for example, incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

6. Modifications of unconstructed units to comply with WAC 173-303-650 (2)(j), (10), (11), and (4)(d) *1

7. Changes in response action plan:

a. Increase in action leakage rate 3

b. Change in a specific response reducing its frequency or effectiveness 3

c. Other changes 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

I. Enclosed Waste Piles. For all waste piles except those complying with WAC 173-303-660 (1)(c), modifications are treated the same as for a landfill. The following modifications are applicable only to waste piles complying with WAC 173-303-660 (1)(c).

1. Modification or addition of waste pile units:

a. Resulting in greater than 25% increase in the facility's waste pile storage or treatment capacity 3

b. Resulting in up to 25% increase in the facility's waste pile storage or treatment capacity 2

2. Modification of waste pile unit without increasing the capacity of the unit 2

3. Replacement of a waste pile unit with another waste pile unit of the same design and capacity and meeting all waste pile conditions in the permit 1

4. Modification of a waste pile management practice 2

5. Storage or treatment of different wastes in waste piles:

a. That require additional or different management practices or different design of the unit 3

b. That do not require additional or different management practices or different design of the unit 2

6. Conversion of an enclosed waste pile to a containment building unit 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

J. Landfills and Unenclosed Waste Piles

1. Modification or addition of landfill units that result in increasing the facility's disposal capacity 3

2. Replacement of a landfill 3

3. Addition or modification of a liner, leachate collection system, leachate detection system, run-off control, or final cover system 3

4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, run-off control, or final cover system 2

5. Modification of a landfill management practice 2

6. Landfill different wastes:

a. That require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system 3

b. That do not require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system 2

c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), and provided that the landfill unit meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a landfill unit that meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2), and provided further that the landfill has previously received wastes of the same type (for example, incinerator ash). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

7. Modifications of unconstructed units to comply with WAC 173-303-660 (2)(j), (11), (12), (5)(c), 173-303-665 (2)(h), (8), (4)(c), and (9). *1

8. Changes in response action plan:

a. Increase in action leakage rate 3

b. Change in a specific response reducing its frequency or effectiveness. 3

c. Other changes 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

K. Land Treatment

1. Lateral expansion of or other modification of a land treatment unit to increase areal extent 3

2. Modification of run-on control system 2

3. Modify run-off control system 3

4. Other modifications of land treatment unit component specifications or standards required in permit 2

5. Management of different wastes in land treatment units:

a. That require a change in permit operating conditions or unit design specifications 3

b. That do not require a change in permit operating conditions or unit design specifications 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

6. Modification of a land treatment unit management practice to:

a. Increase rate or change method of waste application 3

b. Decrease rate of waste application 2

7. Modification of a land treatment unit management practice to change measures of pH or moisture content, or to enhance microbial or chemical reactions 2

8. Modification of a land treatment unit management practice to grow food chain crops, to add to or replace existing permitted crops with different food chain crops, or to modify operating plans for distribution of animal feeds resulting from such crops 3

9. Modification of operating practice due to detection of releases from the land treatment unit pursuant to WAC 173-303-655 (6)(g)(ii) 3

10. Changes in the unsaturated zone monitoring system, resulting in a change to the location, depth, number of sampling points, or replace unsaturated zone monitoring devices or components of devices with devices or components that have specifications different from permit requirements 3

11. Changes in the unsaturated zone monitoring system that do not result in a change to the location, depth, number of sampling points, or that replace unsaturated zone monitoring devices or components of devices with devices or components having specifications different from permit requirements 2

12. Changes in background values for hazardous constituents in soil and soil-pore liquid 2

13. Changes in sampling, analysis, or statistical procedure 2

14. Changes in land treatment demonstration program prior to or during the demonstration 2

15. Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the director's prior approval has been received 2

16. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the director 2

17. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration 3

18. Changes in vegetative cover requirements for closure 2

L. Incinerators, Boilers, and Industrial Furnaces

1. Changes to increase by more than 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The department will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

2. Changes to increase by up to 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The department will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means . . 2

3. Modification of an incinerator, boiler, or industrial furnace unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove HC1/$C1_2$, metals, or particulate from the combustion gases, or by changing other features of the incinerator, boiler, or industrial furnace that could affect its capability to meet the regulatory performance standards. The department will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

4. Modification of an incinerator, boiler, or industrial furnace unit in a manner that would not likely affect the capability of the unit to meet the regulatory performance standards but which would change the operating conditions or monitoring requirements specified in the permit. The department may require a new trial burn to demonstrate compliance with the regulatory performance standards . 2

5. Operating requirements:

a. Modification of the limits specified in the permit for minimum or maximum combustion gas temperature, minimum combustion gas residence time, oxygen concentration in the secondary combustion chamber flue gas carbon monoxide and hydrocarbon concentration, maximum temperature at the inlet to the particulate matter emission control system, or operating parameters for the air pollution control system. The department will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

b. Modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls 3

c. Modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit 2

6. Burning different wastes:

a. If the waste contains a POHC that is more difficult to burn than authorized by the permit or if burning of the waste requires compliance with different regulatory performance standards than specified in the permit. The department will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

b. If the waste does not contain a POHC that is more difficult to burn than authorized by the permit and if burning of the waste does not require compliance with different regulatory performance standards than specified in the permit 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

7. Shakedown and trial burn:

a. Modification of the trial burn plan or any of the permit conditions applicable during the shakedown period for determining operational readiness after construction, the trial burn period, or the period immediately following the trial burn 2

b. Authorization of up to an additional 720 hours of waste burning during the shakedown period for determining operational readiness after construction, with the prior approval of the department . . . . . [1]1

c. Changes in the operating requirements set in the permit for conducting a trial burn, provided the change is minor and has received the prior approval of the department . . . . . [1]1

d. Changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided the change is minor and has received the prior approval of the department . . . . . [1]1

8. Substitution of an alternate type of nondangerous fuel that is not specified in the permit 1

M. Containment Buildings

1. Modification or addition of containment building units:

a. Resulting in greater than 25% increase in the facility's containment building storage or treatment capacity. 3

b. Resulting in up to 25% increase in the facility's containment building storage or treatment capacity. . . . 2

2. Modification of a containment building unit or secondary containment system without increasing the capacity of the unit. 2

3. Replacement of a containment building with a containment building that meets the same design standards provided:

a. The unit capacity is not increased. 1

b. The replacement containment building meets the same conditions in the permit. 1

4. Modification of a containment building management practice. 2

5. Storage or treatment of different wastes in containment buildings:

a. That require additional or different management practices. 3

b. That do not require additional or different management practices. 2

N. Corrective Action

1. Approval of a corrective action management unit pursuant to WAC 173-303-646 (4), (5), and (6) 3

2. Approval of a temporary unit or time extension for a temporary unit pursuant to WAC 173-303-646(7) 2

3. Modification to incorporate a corrective action order issued pursuant to MTCA 3

4. Modification or amendment of a corrective action order issued pursuant to MTCA when the MTCA public participation requirements are met and order has already been incorporated by reference into the permit 1

[1] Class 1 modifications requiring prior Agency approval.

(5) Permit termination. The department will follow the applicable procedures in WAC 173-303-840, procedures for decision making, in terminating any permit. The following are causes for terminating a permit during its term or for denying a permit renewal application:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

(c) A determination that the permitted activity endangers public health or the environment and can only be regulated to acceptable levels by permit modification or termination.

(6) Schedules of compliance.

(a) General. The permit may, when appropriate, specify a schedule of compliance leading to compliance with chapter 173-303 WAC.

(b) Time for compliance. Any schedules of compliance under this section will require compliance as soon as possible.

(c) Interim dates. If a permit establishes a schedule of compliance which exceeds one year from the date of permit issuance, the schedule will set forth interim requirements and the dates for their achievement as follows;

(i) The time between interim dates will not exceed one year; or

(ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than one year and is not readily divisible into stages for completion, the permit will specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(d) Reporting. The permit will 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 department in writing of its compliance or noncompliance with the interim or final requirements.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-830, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-830, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-830, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-830, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-830, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-830, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-830, filed 2/10/82.]

WAC 173-303-840 Procedures for decision making.

(1) Application and completeness.

(a) The department will not begin the processing of a permit until the applicant has fully complied with the application requirements for the permit. Permit applications must comply with the signature and certification requirements of WAC 173-303-810 (12) and (13).

(b) The department will review for completeness each application for a permit under this chapter. Each application for a permit should be reviewed for completeness within sixty days of its receipt. Upon completing the review, the department will notify the applicant in writing whether or not the application is complete. If the application is incomplete, the department will list the information necessary to make the application complete, and will specify in the notice of deficiency a date for submitting the necessary information. After the application is completed, the department may request additional information from an applicant but only when necessary to clarify, modify, or supplement previously submitted material. Requests for such additional information will not render an application incomplete.

(c) If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied and appropriate enforcement actions may be taken under chapter 70.105 RCW.

(d) If the department decides that a site visit is necessary for any reason in conjunction with the processing of an application, then the department will notify the applicant and a date will be scheduled.

(e) The effective date of an application is the date on which the department notifies the applicant that the application is complete as provided in (b) of this subsection.

(2) Draft permits.

(a) A draft permit is a document prepared by the department indicating the tentative decision to issue, deny, modify, revoke and reissue, or terminate a permit.

(b) When an application is complete, the department will tentatively decide whether to prepare a draft permit, or to deny the application.

(c) If the department tentatively decides to deny the permit application, then the department will issue a notice of intent to deny. A notice of intent to deny the permit application is a type of draft permit which follows the same procedures as any draft permit prepared under this subsection. If the department's final decision is that the tentative decision to deny was incorrect, then the department will withdraw the notice of intent to deny and proceed to prepare a draft permit under this subsection.

(d) If the department decides to prepare a draft permit, it will contain the following information:

(i) All conditions applicable to permits under WAC 173-303-810;

(ii) Applicable conditions under WAC 173-303-830; 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.

(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, and other appropriate government authorities, including any affected states;

(D) Persons on the mailing list developed by:

(I) Including those who request in writing to be on the list;

(II) Soliciting persons for an area list from participants in past permit proceedings in that area; and

(III) Notifying the public of the opportunity to be put on the mailing list through periodic publications in the public press and in appropriate publications of the department;

(E) Any unit of local government having jurisdiction over the area where the facility is proposed to be located, and each state agency having any authority under state law with respect to construction or operation of such facility;

(ii) For major permits, by publication of a notice in a daily or weekly newspaper within the area affected by the facility;

(iii) For all permits, by publication of notice in a daily or weekly major local newspaper of general circulation, and local radio broadcast of the public notice; and

(iv) By any other method reasonably calculated to give notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(4) Contents of the public notice.

(a) All public notices issued will contain the following minimum information:

(i) Name and address of the office processing the permit action for which notice is being given;

(ii) Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit;

(iii) A brief description of the business conducted at the facility or activity described in the permit application or the draft permit;

(iv) Name, address, and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit, fact sheet or statement of basis, and the application;

(v) A brief description of the comment procedures and the time and place of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision;

(vi) And any additional information considered necessary or proper.

(b) In addition to the general public notice described in (a) of this subsection, public notice of a hearing under subsection (5) of this section will contain the following information:

(i) Date, time, and place of the hearing;

(ii) Reference to the date of the previous public notice relating to the permit; and

(iii) A brief description of the nature and purpose of the hearing including the applicable rules and procedures.

(c) In addition to the general public notice all persons identified in WAC 173-303-840 (3)(e)(i)(A), (B), and (C)

will be mailed a copy of the fact sheet, the permit application (if any), and the draft permit (if any).

(d) Public comments and request for public hearings. During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing must be in writing and must state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and will be answered according to WAC 173-303-840(9).

(5) Public hearings.

(a) The department will hold a public hearing whenever, on the basis of requests, there is a significant degree of public interest in a draft permit or there is written notice of opposition and the director receives a request for a hearing during the forty-five day comment period. The department also may hold a public hearing at its discretion, whenever, for instance, such a hearing might clarify one or more issues involved in the permit decision. Public notice of the hearing will be given as specified in WAC 173-303-840(3). Whenever possible, the department will schedule a public hearing under this subsection at a location convenient to the nearest population center to the proposed facility.

(b) Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. The public comment period under WAC 173-303-840(3) will automatically be extended to the close of any public hearing under this subsection. The hearing officer may also extend the comment period by so stating at the hearing.

(c) A tape recording or written transcript of the hearing will be made available to the public.

(6) Obligation to raise issues and provide information during the public comment period.

(a) All persons, including applicants, who believe any condition of a draft permit is inappropriate, or that the department's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position, including all supporting material, by the close of the public comment period (including any public hearing) under WAC 173-303-840(3).

(b) All supporting materials will be included in full and may not be incorporated by reference, unless they are already part of the administrative record in the same proceeding, or consist of state or federal statutes and regulations, documents of general applicability, or other generally available reference materials. Commenters must make supporting material not already included in the administrative record available to the department. A comment period longer than thirty 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) and (4), or terminated for the reasons specified in WAC 173-303-805 or 173-303-806. 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), 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 section, 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) "Minor modifications" as defined in WAC 173-303-830(4) are not subject to the requirements of this section.

(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 and 70.105D RCW. 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 173-303-902 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 owners/operators of facilities or portions of facilities applying for research, development and demonstration permits, pursuant to section 3005(g) of the Resource Conservation and Recovery Act, codified in 40 CFR Part 270.65. In addition, this section does not apply to mobile facilities for on-site cleanup at treatment, storage, or disposal facilities undergoing closure, facilities operating under an emergency permit pursuant to WAC 173-303-804, or facilities for on-site cleanup of sites under the Comprehensive Environmental Response, Compensation, and Liability Act, or chapters 70.105, 90.48 RCW, and The Model Toxics Control Act.

(3) Relationship to other legislation and administrative rules.

(a) The lead local government receiving a grant under this section, must comply fully with all applicable federal, state, and local laws, orders, regulations, and permits.

(b) Nothing in this section will influence, affect, or modify department programs, regulations, or enforcement of applicable laws relating to dangerous waste management and disposal.

(c) All grants under this section will be subject to all existing accounting and auditing requirements of state laws and regulations applicable to the issuance of grant funds.

(4) Definitions. As used in this section:

(a) "Citizen/proponent negotiations (CPN)" means a communication process, as specified in these regulations and associated guidelines, between the proponent of a dangerous waste management facility and potentially affected citizens, to reach an agreement when there are shared and opposing interests.

(b) "Designated zone facility" means any facility that requires an interim or final status permit, located in a land use zone designated for handling hazardous substances and hazardous waste, and is not a preempted facility as defined in this section.

(c) "Environmental impact statement (EIS)" means an environmental document prepared according to the State Environmental Policy Act (SEPA), that provides decision makers and the public with an impartial discussion of probable significant environmental impacts, reasonable alternatives, and mitigation measures that would avoid impacts, minimize adverse impacts, or enhance environmental quality.

(d) "Existing facility," as defined by WAC 173-303-281, means a facility for which an interim or final status permit has been issued by the department pursuant to WAC 173-303-805 or 173-303-806.

(e) "Expansion," as defined by WAC 173-303-281, means the enlargement of the land surface area of an existing facility from that described in an interim status permit, the addition of a new dangerous waste management process, or an increase in the overall design capacity of existing dangerous waste management processes at a facility. However, a process or equipment change within the existing handling code (not to include "other") as defined under WAC 173-303-380 (2)(d) will not be considered a new dangerous waste management process.

(f) "Facilitator" means one who assists at a meeting or group discussion.

(g) "Grant applicant" means the lead local government requesting a citizen/proponent negotiations grant.

(h) "Lead local government" means the city or county in which all or a majority of the proposed dangerous waste management facility would be located, unless the lead local government is a proponent of the project.

(i) "Local negotiating committee" means a committee, appointed by the lead local government, whose membership consists of broad representation from city and county government, citizen groups, academia, business, industry, Indian tribes, and environmental groups potentially affected by the siting of a dangerous waste management facility.

(j) "Mediator" means a neutral person who is accepted voluntarily by opposing parties in a dispute to assist in reaching a settlement.

(k) "Notice of intent," as specified in WAC 173-303-281, means the notice provided by the owner/operator of a facility to the department, local communities, and the public stating that the siting of a dangerous waste management facility, or the expansion of an existing facility, is being considered.

(l) "Neutral convener" means a nonpartisan person hired by the lead local government to convene and preside over the official public meeting.

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

Local jurisdictions who fail to establish designated land use zones for handling hazardous substances and hazardous waste within eighteen months after the enactment of siting criteria in accordance with RCW 70.105.210 will be subject to preemptive provisions until such time as zone designations are completed and approved by the department.

(n) "Potentially affected area" means the area within a twenty-mile radius of a proposed dangerous waste management facility or a proposed expansion to an existing facility or, any area of impact larger or smaller than the twenty-mile radius as determined by the department.

(o) "Proponent" means any person applying to the department for a dangerous waste management facility permit or for the expansion of an existing permit under WAC 173-303-805 or 173-303-806.

(p) "Proposed facility" means a facility that does not have interim or final status on the effective date of this section, and for which the owner/operator applies for an interim or final status permit under WAC 173-303-805 or 173-303-806 after the effective date of this section.

(q) "SEPA" means the State Environmental Policy Act, chapter 43.21C RCW, and SEPA rules, chapter 197-11 WAC.

(5) Citizen/proponent negotiations procedures.

(a) Notice of intent. A proponent for a dangerous waste management facility must apply to the department for a dangerous waste management facility permit or for the expansion of an existing permit. In compliance with WAC 173-303-281, the proponent must submit a notice of intent to the department no less than one hundred fifty days prior to filing an application for a permit or permit revision.

(b) Notice letter.

(i) Within fourteen days of receipt of the notice of intent, the department will send, by registered mail, a copy of the notice of intent, a copy of the CPN regulation, associated guidelines, and a CPN grant application to the elected officials of the lead local government and all local governments within the potentially affected area.

(ii) The notice letter will alert all communities within the potentially affected area that a notice of intent to file was submitted to the department, the availability of a CPN grant, the procedures for applying for a CPN grant, and the procedures for conducting the CPN process.

(iii) Within thirty days of the effective date of this section, the department will send, by registered mail, a notice letter to all local governments potentially affected by facilities for which the department has already received a permit application. The notice letter will contain a copy of the CPN regulation, associated guidelines, and a CPN grant application.

(iv) If the lead local government is also a proponent of the facility, responsibility for CPN will be deferred to a committee comprised of representatives from all incorporated cities and towns, and all the counties in the potentially affected area. This committee must decide, among the government entities represented, who will be the lead local government for the purposes of applying for and administering the CPN grant and selecting members to the negotiating committee as set forth in subsection (6) of this section.

(c) Selection of the neutral convener. Within sixty days of the notice letter, the lead local government and the facility proponent must jointly select a neutral convener, facilitator, or mediator to organize and preside over an official public meeting, assist in selecting the local negotiating committee, and mediate citizen/proponent negotiations.

(d) The public meeting. The purpose of the public meeting will be:

(i) To advise local citizens within the potentially affected area of the CPN procedures, the State Environmental Policy Act (SEPA) requirements, and the dangerous waste management permit process;

(ii) To allow the proponent to present elements of the proposal;

(iii) To take public testimony on whether to agree to participate in the CPN process.

(e) Expenditures by the lead local government for the initial costs of the neutral convener and the official public meeting will be reimbursed by the department through an interagency agreement with the lead local government.

(f) Decision notice. Within forty-five days of the public meeting the lead local government must decide whether to proceed with the negotiations process. The lead local government must forward notice of that decision to the department and the proponent of the facility. Notice to the department of an affirmative decision may include a completed grant application for financial assistance. If the lead local government decides to participate in the negotiations process for preempted facilities, then the proponent will be required to participate. Citizen/proponent negotiations at designated zone facilities will be voluntary for both parties.

(g) Appointment of local negotiating committee. Within thirty days of the decision notice to proceed with CPN, the lead local government and local governments within the potentially affected area must appoint members to a local negotiating committee, as set forth in subsection (6) of this section, and mail notice of those appointments to the department and to the facility proponent.

(h) Organizational meeting. Within twenty-one days of the committee appointments, the committee must hold an organizational meeting to establish the committee goals, set schedules, identify tasks, discuss funding, and identify issues to research.

(i) Negotiations process. The negotiations process may occur in two stages.

(i) Stage 1. Within thirty days of the organizational meeting, the local negotiating committee, with the assistance of the neutral convener, must initiate negotiations and public

information and education activities. The local negotiating committee will have one hundred twenty days, or until completion of the SEPA process, to conduct public information and education activities on dangerous waste management and dangerous waste management facilities and to negotiate emerging issues and concerns.

(ii) Stage 2. Upon completion of the SEPA process, with the assistance of the neutral convener, the local negotiating committee may continue formal negotiations. If no environmental impact statement is required as part of the SEPA process, the local negotiating committee may negotiate for up to one hundred twenty days. If an environmental impact statement is required as part of the SEPA process, negotiations may take place until one hundred twenty days after the issuance of the final environmental impact statement. Upon completion of formal negotiations, all agreements should be submitted to the department for review for applicability to the operating permit.

(iii) Negotiations should focus on the mitigation of impacts identified by persons in the affected area and those impacts identified during the SEPA process, which may include but are not limited to:

(A) Technical aspects of the facility proposal;

(B) Emergency response;

(C) Economic impacts;

(D) Management of the facility;

(E) Site characteristics;

(F) Transportation;

(G) Compliance assurance.

(iv) During each stage of the negotiations process, the committee must, at a minimum:

(A) Arrange public forums at key points in the negotiations to solicit input from the local community and provide public education regarding the issues and elements of the proposed facility or facility expansion.

(B) Arrange smaller community gatherings with the whole committee or subgroups of the committee to supplement the larger meetings and to provide more opportunities for discussion with community members.

(C) Meet with key community leaders to solicit information and opinion.

(D) Prepare a draft of the completed local negotiating committee report and agreements. The draft must be submitted for review and comment to the proponent and local county, city, and town officials who made the committee appointments.

(E) Prepare the final local negotiating committee report and agreements. Final copies must be submitted to the department and distributed to the proponent and local county, city, and town officials who made the committee appointments.

(v) Negotiations may be reopened upon agreement by both parties as long as a draft permit has not been issued.

(j) Agreements. Any specific agreement reached between the local negotiating committee and the proponent, deemed valid and applicable by the department, may be incorporated in the operating permit issued by the department. Any agreements not applicable to the operating permit may be implemented by the proponent and local communities through a contract or other legal means.

(6) Local negotiating committee.

(a) Appointments to the local negotiating committee must be made as follows:

(i) Four members must be appointed by the lead local government.

If the lead local government is the county, committee appointments will be made by the county executive in charter counties or the board of county commissioners. If the lead local government is an incorporated town or city, committee appointments will be made by the mayor.

(ii) The mayor of each incorporated city or town in the potentially affected area, that is not a lead local government, must appoint one member to the committee.

(iii) The county executive or the board of county commissioners of each county in the potentially affected area, that is not a lead local government, must appoint one member to the committee.

(iv) Each federally-recognized Indian tribe located in the potentially affected area must appoint one member to the committee.

(v) If all or the majority of a facility is located wholly within city limits, the board of county commissioners or county executive of the potentially affected county must appoint two members to the citizen negotiating committee. If the facility is located wholly within the county, these appointments will not be made.

(b) Local negotiating committees must have broad representation including but not limited to representation from academia, business and industry, citizen organizations, environmental groups, agricultural groups, health professionals, emergency response organizations, and fire districts.

(c) After the initial committee appointments are made, the neutral convener must assess the group representation and determine which interest groups are not represented. The committee, with the aid of the neutral convener, will then select up to four additional members to serve on the local negotiating committee. These selections must be made from interest groups not already represented on the negotiating committee.

(d) Elected officials will not be members of the local negotiating committee.

(7) Modified CPN procedures. Modified CPN procedures apply to lead local governments who are also proponents of a dangerous waste management facility.

(a) Notice letter. Within fourteen days of the notice of intent or thirty days of the effective date of this section, the department will notify all local governments in the potentially affected area of applications for proposed facilities or expansions of existing facilities and of the opportunity for formal negotiations under CPN and the availability of a CPN grant.

(b) Decision notice. The local governments will have forty-five days to form a committee to:

(i) Determine whether they wish to participate in CPN;

(ii) Determine who will be the lead local government;

(iii) Select a neutral convener, facilitator, or mediator;

(iv) Notify the department and the proponent of those decisions; and

(v) Complete a grant application for financial assistance if a decision is made to proceed with CPN.

(c) Once the lead local government is determined, modified CPN procedures must follow CPN procedures set forth in subsections (5)(d) through (6)(d) of this section.

(8) Grant eligibility and eligible activities.

(a) Grant applicant eligibility and eligible activities are the same for CPN and modified CPN.

(b) Grant applicant eligibility. Grants up to fifty thousand dollars will be awarded to the lead local government and may be renewed once during the permitting process.

(c) Eligible costs. Eligible costs include direct costs of the activities of the negotiating process. These costs include:

(i) The local committee's expenses such as travel, office space or lodging, supplies, postage, report production costs, and meeting room costs;

(ii) Neutral convener's, facilitator's, or mediator's fees and expenses;

(iii) Technical assistance for the committee; and

(iv) Other costs determined necessary by the department.

(d) Ineligible costs. Grant funds may not be used by the grant applicant to support legal actions against the department, or facility owners/operators.

(9) Grant administration and funding.

(a) A grant application package will be sent to the lead local government with the notice letter. Grant application packages include grant application deadlines, grant guidelines, and application forms.

(b) Completed grant applications will be reviewed by the department. To receive a grant offer, successful applications must include all required elements as outlined in the guidelines.

(c) The obligation of the department to make grant awards and payments is contingent upon the availability of funds through legislative appropriation and allotment, and such other conditions not reasonably foreseeable by the department rendering performance impossible. When the grant crosses over bienniums, the obligation of the department is contingent upon the appropriation of funds during the next biennium.

(d) The department will fund up to fifty percent of the total grant amount or up to fifty thousand dollars for citizen/proponent negotiations and the proponent of a dangerous waste management facility must fund up to fifty percent of the total grant amount or up to fifty thousand dollars.

(e) Disbursement of funds. The department will be responsible for reimbursement of all eligible CPN costs incurred. The proponent must enter into a contract with the department for the proponent's share of the CPN grant. The department will be responsible for all eligible CPN costs incurred before the decision notice and its share of any eligible CPN costs incurred after the decision notice, up to fifty thousand dollars. The proponent will be responsible for its share of all remaining eligible CPN costs incurred after the decision notice and after an executed grant award is made to the lead local government, up to fifty thousand dollars.

(f) The department, on at least a biennial basis, will determine the amount of funding available for citizen/proponent negotiation grants.

(g) All grantees will be held responsible for payment of salaries, consultant's fees, and other overhead costs contracted under a grant awarded to the lead local government.

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

(i) All grants under this chapter will be consistent with the provisions of "Financial Guidelines for Grant Management" WDOE 80-6, May 1980, Reprinted March 1982, or subsequent guidelines adopted thereafter.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-902, filed 10/19/95, effective 11/19/95. Statutory Authority: RCW 70.105.260 and 1989 c 2. 89-21-071 (Order 89-25), § 173-303-902, filed 10/17/89, effective 11/17/89.]

WAC 173-303-905 Response to requests for public records. RCW 42.17.320 requires that the department, when responding to requests for public records make such responses "promptly." The department often receives requests, submitted pursuant to chapter 42.17 RCW, for public records that exist because of the requirements of or actions mandated by this chapter (such public records are referred to as dangerous waste records). When the department receives requests for such dangerous waste records, then the department will respond promptly, as required by RCW 42.17.320, and in no event will the response occur later than twenty working days after receipt of the public request submitted pursuant to chapter 42.17 RCW.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-905, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-905, filed 9/6/88.]

WAC 173-303-910 Petitions. (1) General petitions.

(a) Any person may petition the department to modify or revoke any provision in this chapter. This subsection sets forth general requirements which apply to all such petitions. The remaining subsections of this section describe additional requirements for specific types of petitions.

(b) Each petition must be submitted to the department by certified mail and must include:

(i) The petitioner's name and address;

(ii) A statement of the petitioner's interest in the proposed action;

(iii) A description of the proposed action, including (where appropriate) suggested regulatory language; and

(iv) A statement of the need and justification for the proposed action, including any supporting tests, studies, or other information.

(c) The department will make a tentative decision to grant or deny the petition and give public notice of the tentative decision in writing. The notice will be distributed to interested persons on a mailing list developed specifically for petitions and persons expressing interest in amendments to this chapter. The public comment period will be a minimum of forty-five days.

(d) Upon the written request of any interested person, the director may, at his discretion, hold a conference to consider oral comments on the action proposed in the petition. A person requesting a conference must state the

issues to be raised and explain why written comments would not suffice to communicate the person's views. The director may in any case decide on his own motion to hold a conference.

(e) After evaluating all public comments the department will make a final decision in accordance with RCW 34.05.330 or 34.05.240. The department will either deny the petition in writing (stating its reasons for denial), or grant the petition and, when appropriate, initiate rule-making proceedings in accordance with RCW 34.05.330.

(2) Petitions for equivalent testing or analytical methods.

(a) Any person seeking to add a testing or analytical method to WAC 173-303-110 may petition for a regulatory amendment under this section. To be successful, the person must demonstrate to the satisfaction of the department that the proposed method is equal to or superior to the corresponding method prescribed in WAC 173-303-110, in terms of its sensitivity, accuracy, and precision (i.e., reproducibility).

(b) Each petition must include, in addition to the information required by subsection (1) of this section:

(i) A full description of the proposed method, including all procedural steps and equipment used in the method;

(ii) A description of the types of wastes or waste matrices for which the proposed method may be used;

(iii) Comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in WAC 173-303-110;

(iv) An assessment of any factors which may interfere with, or limit the use of, the proposed method; and

(v) A description of the quality control procedures necessary to ensure the sensitivity, accuracy and precision of the proposed method.

(c) After receiving a petition for an equivalent testing or analytical method, the department may request any additional information on the proposed method which it may reasonably require to evaluate the proposal.

(d) If the department amends the regulations to permit use of a new testing method, the method will be incorporated in a document which will be available from the department.

(3) Petitions for exempting dangerous wastes from a particular generator.

(a) Any generator seeking to exempt his dangerous waste may petition the department for exemption from the requirements of WAC 173-303-070 through 173-303-100.

(b) To be successful, the generator must make the demonstrations required in WAC 173-303-072(3) and, where applicable, (4) and (5).

(c) Each petition must include, in addition to the information required by subsection (1) of this section:

(i) The name and address of the laboratory facility performing the sampling or tests of the waste;

(ii) The names and qualifications of the persons sampling and testing the waste;

(iii) The dates of sampling and testing;

(iv) The location of the generating facility;

(v) A description of the manufacturing processes or other operations and feed materials producing the waste and an assessment of whether such processes, operations, or feed materials can or might produce a waste that is not covered by the demonstration;

(vi) A description of the waste and an estimate of the average and maximum monthly and annual quantities of waste covered by the demonstration;

(vii) Pertinent data on and discussion of the factors delineated in WAC 173-303-072(3) and, where applicable, (4) and (5);

(viii) A description of the methodologies and equipment used to obtain the representative samples;

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

(x) A description of the tests performed (including results);

(xi) The names and model numbers of the instruments used in performing the tests and the date of the last calibration for instruments which must be calibrated according to manufacturer's instructions; and

(xii) The following statement signed by the generator of the waste or his authorized representative:

> I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(d) After receiving a petition for a dangerous waste exemption, the department may request any additional information which it may reasonably require to evaluate the petition.

(e) An exemption will only apply to the waste generated by the particular generator covered by the demonstration and will not apply to waste from any other generator.

(f) The department may exempt only part of the waste for which the demonstration is submitted where there is reason to believe that variability of the waste justifies a partial exemption.

(g) The department may (but will not be required to) grant a temporary exemption before making a final decision under subsection (1) of this section, whenever it finds that there is a substantial likelihood that an exemption will be finally granted.

(h) Any waste for which an exemption is sought will remain designated and be subject to the applicable requirements of this chapter until the generator of the waste is notified by the department that his waste is exempt.

(4) Petition for exclusion.

(a) Any generators seeking exclusion of a class of similar or identical wastes under WAC 173-303-071, excluded categories of waste, may petition the department for exclusion. To be successful, the generator(s) must make the demonstrations required in WAC 173-303-072(6) for all those wastes generated in the state which might be excluded pursuant to granting a petition submitted under this subsection. No class of wastes will be excluded if any of the wastes are regulated as hazardous waste under 40 CFR Part 261.

(b) Each petition for exclusion must include the information required by subsections (1) and (3)(c) of this section and any other information required by the department.

(c) After receiving a petition for exclusion, the department may request any additional information it deems necessary to evaluate the petition.

(5) Petition for designation change. The provisions of (a)(i) of this subsection do not apply to any dangerous waste which is also designated as a hazardous waste under 40 CFR Part 261 Subpart D.

(a) A generator may petition the department to change the designation of his waste as follows:

(i) A waste which is designated only for toxicity pursuant to WAC 173-303-100 but which is toxic solely because it is highly acidic or basic (i.e., due to high or low pH) may be subject only to the requirements for corrosive dangerous wastes, provided that the generator can demonstrate this fact to the department's satisfaction through information provided under (b) of this subsection; and

(ii) A waste which is designated EHW may be redesignated DW, provided that the generator can demonstrate that such redesignation is appropriate through information provided under (b) of this subsection.

(b) A petition under this subsection must include:

(i) The information required by subsections (1) and (3)(c) of this section; and

(ii) Such other information as required by the department.

(c) A designation change under this subsection will become effective only after the department has approved the change and notified the generator of such approval.

(6) Petitions to allow land disposal of a waste restricted under WAC 173-303-140.

(a) Any person seeking a land disposal restriction exemption allowed under WAC 173-303-140(6) must submit a petition to the department. The petition must include the following general information:

(i) The petitioner's name and address;

(ii) A statement of the petitioner's interest in the proposed action;

(iii) A description of the proposed action;

(iv) A statement of the need and justification for the proposed action;

(v) An identification of the specific waste and the specific land disposal unit for which the exemption is desired;

(vi) A waste analysis to describe fully the chemical and physical characteristics of the subject waste. All waste and environmental sampling, test, and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow; and

(vii) A quality assurance and quality control plan that addresses all sampling and testing aspects of the information provided in the petition.

(b) In addition to the general information requirements in subsection (a) of this section, the following specific information must be provided in the petition for individual case-by-case exemptions.

(i) Petition for land disposal exemption for treatment residuals. Petitions for exemption of treatment residuals, as allowed under WAC 173-303-140 (6)(a), must:

(A) Provide the type of waste management or treatment method applied to the waste and the rationale for selecting this method as the best achievable management method; and

(B) Document that the land disposal of the treatment residual would not pose a greater risk to public health and the environment than land disposal of the original wastes, including an analysis of the treatment residuals to fully describe their chemical and physical characteristics; and

(C) Provide the management alternatives for the treatment residuals and the factors which, if an exemption is not granted, would prevent the utilization of the best achievable management method for the original dangerous waste.

(ii) Petition for economic hardship exemption. Petitions for exemption on the basis of economic hardship, as allowed under WAC 173-303-140 (6)(b), must:

(A) Supply the current management costs and the projected management costs to comply with the requirements of WAC 173-303-140; and

(B) Provide the source of information utilized in determining the economic estimates; and

(C) Provide a discussion of how the projected compliance costs would impose an unreasonable economic burden.

(iii) Petition for leachable inorganic waste exemption. Petitions for exemption of leachable inorganic wastes, as allowed under WAC 173-303-140 (6)(c), must:

(A) Provide information demonstrating that the stabilization of the dangerous waste is less protective of public health and the environment than landfilling; or

(B) Provide a list of stabilization facilities that could accept the dangerous waste and information demonstrating that they do not have available capacity to stabilize the waste; or

(C) Provide information describing the types of stabilization utilized which did not reduce the solubility and mobility of the dangerous waste constituents and describe any other stabilization methods that have been considered but not utilized.

(iv) Petition for organic/carbonaceous waste exemption. Petitions for exemption of organic/carbonaceous wastes, as allowed under WAC 173-303-140 (6)(d), must:

(A) Provide information demonstrating that recycling, treatment and incineration facilities are unavailable for the waste, including a map marked both with the point of waste generation and the point(s) of the nearest treatment, recycling and incineration facility(s) that could manage the dangerous waste; or

(B) Provide information demonstrating that the alternative management methods for organic/carbonaceous waste are less protective of public health and the environment than stabilization and landfilling; or

(C) Provide information demonstrating that:

(I) Recycling and treatment facilities are unavailable for the waste, including a map marked both with the point of waste generation and the point(s) of the nearest treatment, recycling and incineration facility(s) that could manage the dangerous waste; and

(II) The organic/carbonaceous waste has a heat content less than 3,000 BTU/LB or a moisture content greater than sixty-five percent.

(c) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(d) Each petition must be submitted to:

Department of Ecology
HWTR Program
ATTN Land Disposal Exemption
PO BOX 47600
Olympia, WA 98504-7600

(e) After receiving a petition, the department may request any additional information that reasonably may be required to evaluate the petition and accompanying demonstration, such as a comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality. Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements.

(f)(i) The department will make a tentative decision to grant or deny the petition and give public notice of the tentative decision in writing. The notice will be distributed to interested persons on a mailing list developed specifically for petitions and persons expressing interest in amendments to this chapter. The public comment period will be a minimum of forty-five days.

(ii) Upon the written request of any interested person, the department may, at its discretion, hold a conference to consider oral comments on the action proposed in the petition. A person requesting a conference must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The department may in any case decide on its own motion to hold a conference.

(iii) After evaluating all public comments the department will make a final decision in accordance with RCW 34.04.060 or 34.04.080. The department will either deny the petition in writing (stating its reasons for denial), or grant the petition.

(g) Prior to the department's decision, the applicant is required to comply with all restrictions on land disposal under WAC 173-303-140. The department should respond to a petition within ninety days.

(h) If an exemption is granted, the department may include specific conditions as deemed necessary by the department to protect public health and the environment.

(i) If granted, the exemption will apply to land disposal of the specific restricted waste at the individual disposal unit described in the petition and accompanying demonstration. The exemption will not apply to any other restricted waste at that disposal unit, nor will it apply to that specific restricted waste at any other disposal unit.

(j) If an exemption is granted, the department may withdraw the exemption on the following bases:

(i) If there is a threat to public health and the environment; or

(ii) If there is migration of dangerous waste constituents from the land disposal unit or site for as long as the waste remains dangerous; or

(iii) If the department finds reason to believe that the information submitted in a petition is inaccurate or has been falsified such that the petition should have been denied.

(k) The term of an exemption granted under this subsection will be established by the department at the time of issuance.

(l) Any exemption granted by the department does not relieve the petitioner of his responsibilities in the management of dangerous waste under chapter 173-303 WAC.

(m) The department may (but will not be required to) grant a temporary exemption before making a final decision, whenever it finds that there is a substantial likelihood that an exemption will be finally granted. Temporary exemptions will not be subject to the procedures of (f) of this subsection. Temporary exemptions will not be a cause of delaying final decision making on the petition request.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-910, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-910, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-910, filed 1/5/88, effective 2/5/88; 86-12-057 (Order DE-85-10), § 173-303-910, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-910, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-910, filed 2/10/82.]

WAC 173-303-9903 Discarded chemical products list.

Discarded Chemical Products List

"P" Chemical Products

Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound is only listed for acute toxicity.

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

Dangerous Waste No.	Chemical Abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H_3AsO_4
P012	1327-53-3	Arsenic oxide As_2O_3
P011	1303-28-2	Arsenic oxide As_2O_5

P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P001	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha, 8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta, 8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta, 6beta,6aalpha,7beta, 7aalpha)-
P051	[1]72-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha, 6alpha,6abeta,7beta, 7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	[1]534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide $Ni(CN)_2$
P075	[1]54-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO_2
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro-
P047	[1]534-52-1	Phenol, 2-methyl-4,6-dinitro-, &

		salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	[1]54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	[1]57-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	[1]57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl_2O_3
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V_2O_5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	[1]81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10% (R,T)

FOOTNOTE: [1]CAS Number given for parent compound only.

"U" Chemical Products

Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.

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

Hazardous Waste No.	Chemical Abstracts No.	Substance
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	[1]94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balpha)]-
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-

U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl- (I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	[1]81-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U064	189-55-9	Benzo[rst]pentaphene
U248	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy- 2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]- 2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*), 7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	[1]111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha, 3beta,4alpha,5alpha,6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-

		hexachloro-
U058	50-18-0	Cyclophosphamide
U240	[1]94-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	[1]111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H_2S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)

U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I, T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-

		[bis(2- chloroethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	[1]81-07-2	Saccharin, & salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS_2 (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl-
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	[1]81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha, 18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations of 10% or less

FOOTNOTE: [1]CAS Number given for parent compound only.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-9903, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9903, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9903, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-9903, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-9903, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-9903, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-9903, filed 2/10/82.]

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

WAC 173-303-9904 Dangerous waste sources list.

The following Hazard Codes are used to indicate the basis EPA used for listing the classes or types of wastes listed in this section:

Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
Toxicity Characteristic Waste	(E)
Acute Hazardous Waste	(H)
Toxic Waste	(T)

DANGEROUS WASTE SOURCES LIST

Dangerous Waste No.	Sources

Nonspecific Sources

Generic:

F001 The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)

F002 The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro- 1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2 trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)

F003 The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recov-

ery of these spent solvents and spent solvent mixtures. (I)

F004 The following spent non-halogenated solvents: Cresols and cresylic acid, nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)

F005 The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I,T)

F006 Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. (T)

F007 Spent cyanide plating bath solutions from electroplating operations. (R,T)

F008 Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. (R,T)

F009 Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. (R,T)

F010 Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. (R,T)

F011 Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. (R,T)

F012 Quenching wastewater treatment sludges from metal heat-treating operations where cyanides are used in the process. (T)

F019 Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. (T)

F020 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.) (See footnote 1, below.) (H)

F021 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives. (See footnote 1, below.) (H)

F022 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions. (See footnote 1, below.) (H)

F023 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (See footnote 1, below.) (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.) (H)

F024 Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes from the production of certain chlorinated aliphatic hydrocarbons by 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 under specific sources, below.) (T)

F025 Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (T)

F026 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions. (See footnote 1, below.) (H)

F027 Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (See footnote 1, below.) (This listing does not include formulations contain-

ing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.) (H)

F028 Residues resulting from the incineration or thermal treatment of soil contaminated with nonspecific sources wastes F020, F021, F022, F023, F026 and F027. (T)

F032 Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with WAC 173-303-083 or potentially cross-contaminated wastes that are otherwise currently regulated as dangerous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)

F034 Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)

F035 Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)

F037 Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: Oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in footnote 2, below (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. (T)

F038 Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: Induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in footnote 2, below (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing. (T)

F039 Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as dangerous under WAC 173-303-9903, 173-303-9904, and 173-303-9905. (Leachate resulting from the disposal of one or more of the following dangerous wastes, and no other dangerous wastes, retains its Dangerous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.) (T)

Specific Sources

Wood Preservation:

K001 Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol. (T)

Inorganic Pigments:

K002 Wastewater treatment sludge from the production of chrome yellow and orange pigments. (T)

K003 Wastewater treatment sludge from the production of molybdate orange pigments. (T)

K004 Wastewater treatment sludge from the production of zinc yellow pigments. (T)

K005 Wastewater treatment sludge from the production of chrome green pigments. (T)

K006 Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated). (T)

K007 Wastewater treatment sludge from the production of iron blue pigments. (T)

K008 Oven residue from the production of chrome oxide green pigments. (T)

Organic Chemicals:

K009 Distillation bottoms from the production of acetaldehyde from ethylene. (T)

K010 Distillation side cuts from the production of acetaldehyde from ethylene. (T)

K011 Bottom stream from the wastewater stripper in the production of acrylonitrile. (R,T)

K013 Bottom stream from the acetonitrile column in the production of acrylonitrile. (R,T)

K014 Bottoms from the acetonitrile purification column in the production of acrylonitrile. (T)

K015 Still bottoms from the distillation of benzyl chloride. (T)

K016 Heavy ends or distillation residues from the production of carbon tetrachloride. (T)

K017 Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin. (T)

K018 Heavy ends from the fractionation column in ethyl chloride production. (T)

K019 Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production. (T)

K020 Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production. (T)

K021 Aqueous spent antimony catalyst waste from fluoromethanes production. (T)

K022 Distillation bottom tars from the production of phenol/acetone from cumene. (T)

K023 Distillation light ends from the production of phthalic anhydride from naphthalene. (T)

K024 Distillation bottoms from the production of phthalic anhydride from naphthalene. (T)

K093 Distillation light ends from the production of phthalic anhydride from ortho-xylene. (T)

K094 Distillation bottoms from the production of phthalic anhydride from ortho-xylene. (T)

K025 Distillation bottoms from the production of nitrobenzene by the nitration of benzene. (T)

K026 Stripping still tails from the production of methyl ethyl pyridines. (T)

K027 Centrifuge and distillation residues from toluene diisocyanate production. (R,T)

K028 Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane. (T)

K029 Waste from the product steam stripper in the production of 1,1,1-trichloroethane. (T)

K095 Distillation bottoms from the production of 1,1,1-trichloroethane. (T)

K096 Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane. (T)

K030 Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene. (T)

K083 Distillation bottoms from aniline production. (T)

K103 Process residues from aniline extraction from the production of aniline. (T)

K104 Combined wastewater streams generated from nitrobenzene/aniline production. (T)

K085 Distillation of fractionation column bottoms from the production of chlorobenzenes. (T)

K105 Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes. (T)

K107 Column bottoms from product separation from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazines. (C,T)

K108 Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from the carboxylic acid hydrazides. (I,T)

K109 Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. (T)

K110 Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. (T)

K111 Product washwaters from the production of dinitrotoluene via nitration of toluene. (C,T)

K112 Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)

K113 Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)

K114 Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)

K115 Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)

K116 Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine. (T)

K117 Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene. (T)

K118 Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. (T)

K136 Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. (T)

K149 Distillation bottoms from the production of alpha-(or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste

does not include still bottoms from the distillation of benzyl chloride.) (T)

K150 Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (T)

K151 Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (T)

Explosives:

K044 Wastewater treatment sludges from the manufacturing and processing of explosives. (R)

K045 Spent carbon from the treatment of wastewater containing explosives. (R)

K046 Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds. (T)

K047 Pink/red water from TNT operations. (R)

Inorganic Chemicals:

K071 Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used. (T)

K073 Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production. (T)

K106 Wastewater treatment sludge from the mercury cell process in chlorine production. (T)

Petroleum Refining:

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

K049 Slop oil emulsion solids from the petroleum refining industry. (T)

K050 Heat exchanger bundle cleaning sludge from the petroleum refining industry. (T)

K051 API separator sludge from the petroleum refining industry. (T)

K052 Tank bottoms (leaded) from the petroleum refining industry. (T)

Iron and Steel:

K061 Emission control dust/sludge from the primary production of steel in electric furnaces. (T)

K062 Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332). (C,T)

Pesticides:

K031 Byproduct salts generated in the production of MSMA and cacodylic acid. (T)

K032 Wastewater treatment sludge from the production of chlordane. (T)

K033 Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T)

K034 Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T)

K097 Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T)

K035 Wastewater treatment sludges generated in the production of creosote. (T)

K036 Still bottoms from toluene reclamation distillation in the production of disulfoton. (T)

K037 Wastewater treatment sludges from the production of disulfoton. (T)

K038 Wastewater from the washing and stripping of phorate production. (T)

K039 Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (T)

K040 Wastewater treatment sludge from the production of phorate. (T)

K041 Wastewater treatment sludge from the production of toxaphene. (T)

K098 Untreated process wastewater from the production of toxaphene. (T)

K042 Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T. (T)

K043 2,6-Dichlorophenol waste from the production of 2,4-D. (T)

K099 Untreated wastewater from the production of 2,4-D. (T)

K123 Process wastewater (including supernates, filtrates, and wastewaters) from the production of ethylenebisdithiocarbamic acid and its salts. (T)

K124 Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. (C,T)

K125 Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts. (T)

K126 Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts. (T)

K131 Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide. (C,T)

K132 Spent absorbent and wastewater separator solids from the production of methyl bromide. (T)

Primary Copper:

K064 Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production. (T)

Primary Lead:

K065 Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities. (T)

Primary Zinc:

K066 Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production. (T)

Primary Aluminum:

K088 Spent potliners from primary aluminum reduction. (T)

Ferroalloys:

K090 Emission control dust or sludge from ferrochromium-silicon production. (T)

K091 Emission control dust or sludge from ferrochromium production. (T)

Secondary Lead:

K069 Emission control dust/sludge from secondary lead smelting. (T)

K100 Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)

Veterinary Pharmaceuticals:

K084 Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)

K101 Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)

K102 Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)

Ink Formulation:

K086 Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead. (T)

Coking:

K060 Ammonia still-lime sludge from coking operations. (T)

K087 Decanter tank tar sludge from coking operations. (T)

Footnotes

1 For wastes listed with the dangerous waste numbers F020, F021, F022, F023, F026, or F027 the quantity exclusion limit is 2.2 lbs. (1 kg) per month or per batch.

2 Listing Specific Definitions:

a For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids.

b(i) For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: Activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and i the units employs a minimum of 6 hp per million gallons of treatment volume; and either ii the hydraulic retention time of the unit is no longer than 5 days; or iii the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a dangerous waste by the Toxicity Characteristic.

(ii) Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities must maintain, in their operating or other on-site records, documents and data sufficient to prove that: i The unit is an aggressive biological treatment unit as defined in this subsection; and ii the sludges sought to be exempted from the definitions of F037 and/or F038 were actually treated in the aggressive biological treatment unit.

c(i) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

(ii) For the purposes of the F038 listing,

A Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement and

B Floats are considered to be generated at the moment they are formed in the top of the unit.

State Sources

W001 Discarded transformers, capacitors or bushings containing polychlorinated biphenyls (PCB) at concentrations of 2 parts per million or greater (except when drained of all free flowing liquid) and the following wastes generated from the salvaging, rebuilding, or discarding of transformers, capacitors or bushings containing polychlorinated biphenyls (PCB) at concentrations of 2 parts per million or greater: Cooling and insulating fluids and cores, including core papers. (Note—Certain PCB wastes are excluded from this listing under WAC 173-303-

071 (3)(k). The generator should check that section to determine if their PCB waste is excluded from the requirements of chapter 173-303 WAC.)

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-9904, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9904, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9904, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-9904, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-9904, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-9904, filed 6/3/86; 85-09-042 (Order DE-85-02), § 173-303-9904, filed 4/15/85; 84-09-088 (Order DE 83-36), § 173-303-9904, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9904, filed 2/10/82.]

WAC 173-303-9905 Dangerous waste constituents list.

Acetic Acid,2,4,5-trichlorophenoxy-, salts and esters
(2,4,5-T, salts and esters)
Acetonitrile [Ethanenitrile]
Acetophenone (Ethanone, 1-phenyl)
-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts (Warfarin)
2-Acetylaminofluorene (Acetemide,N-9H- fluoren-2-yl)-)
Acetyl chloride (Ethanoyl chloride)
1-Acetyl-2-thiourea (Acetamide, N-(aminothioxomethyl)-)
Acrolein (2-Propenal)
Acrylamide (2-Propenamide)
Acrylonitrile (2-Propenenitrile)
Aflatoxins
Aldrin (1,2,3,4,10,10-Hexachloro- 1,4,4a,5,8,8a,-hexahydro-endo,exo- 1,4:5,8-Dimethanonaphthalene)
Allyl alcohol (2-Propen-1-ol)
Allyl chloride (1-Propane, 3-chloro)
Aluminum phosphide
4-Aminobiphenyl ([1,1'-Biphenyl]-4-amine)
6-Amino-1,1a,2,8,8a,8b-hexahydro-8-(hydroxymethyl)-8a-methoxy-5-methyl- carbamate azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, (ester) (Mitomycin C) (Azirino[2'3':3,4]pyrrolo(1,2-a)indole-4,7- dione, 6-amino-8[
4-Aminopyridine(4-Pyridinamine)
Arsenic and compounds, N.O.S.*
Barium and compounds, N.O.S.*
Barium cyanide
Benz[c]acridine (3,4-Benzacridine)
Benz[a]anthracene (1,2-Benzanthracene)
Benzene (Cyclohexatriene)
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 and 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)
Bromoacetone (2-Propanone, 1-bromo-)
Bromomethane (Methyl bromide)
4-Bromophenyl phenyl ether (Benzene, 1-bromo-4-phenoxy-)
Brucine (Strychnidin-10-one, 2,3-dimethoxy-)
2-Butanone peroxide (Methyl ethyl ketone, peroxide)
Butyl benzyl phthalate (1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester)
2-sec-Butyl-4,6-dinitrophenol (DNBP) (Phenol, 2,4-dinitro-6-(1-methylpropyl)-)
Cadmium and compounds, N.O.S.*
Calcium chromate (Chromic acid, calcium salt)
Calcium cyanide
Carbamic Acid, ethyl ester
Carbon disulfide (Carbon bisulfide)
Carbon oxyfluoride (Carbonyl fluoride)
Chloral (Acetaldehyde, trichloro-)
Chlorambucil (Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-)
Chlordane (alpha and gamma isomers) (4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3,4,7,7a-tetrahydro-) (alpha and gamma isomers)
Chlorinated benzenes, N.O.S.*
Chlorinated ethane, N.O.S.*
Chlorinated fluorocarbons, N.O.S.*
Chlorinated naphthalene, N.O.S.*
Chlorinated phenol, N.O.S.*
Chloroacetaldehyde (Acetaldehyde, chloro-)
Chloroalkyl ethers, N.O.S.*
P-Chloroaniline (Benzenamine, 4-chloro-)
Chlorobenzene (Benzene, chloro-)
Chlorobenzilate (Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-,ethyl ester)
2-Chloro-1,3-butadiene
p-Chloro-m-cresol (Phenol, 4-Chloro-3-methyl)
1-Chloro-2,3-epoxypropane (Oxirane, 2-(chloromethyl)-)
2-Chloroethyl vinyl ether (Ethene, (2-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 tars
Copper cyanide
Creosote (Creosote, wood)
Cresols (Cresylic acid) (Phenol, methyl-)
Crotonaldehyde (2-Butenal)
Cyanides (soluble salts and complexes), N.O.S.*
Cyanogen (Ethanedinitrile)
Cyanogen bromide (Bromine cyanide)
Cyanogen chloride (Chlorine cyanide)
Cycasin (beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl-)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-cyclohexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2,-Oxazaphosphorine, [bis(2-chloroethyl)amino]-tetrahydro-, 2-oxide)
Daunomycin (5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-)
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
Diethylstilbesterol (4,4'-Stilbenediol, alpha,alpha-diethyl, bis(dihydrogen phosphate, (E)-)
Dihydrosafrole (Benzene, 1,2-methylenedioxy-4-propyl-)
3,4-Dihydroxy-alpha-(methylamino)methyl benzyl alcohol (1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-)
Diisopropylfluorophosphate (DFP) (Phosphorofluoridic acid, bis(1-methylethyl) ester)
Dimethoate (Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
3,3'-Dimethoxybenzidine ([1,1'-Biphenyl]-4,4'diamine, 3-3'dimethoxy-)
p-Dimethylaminoazobenzene (Benzenamine, N,N-dimethyl-4-(phenylazo)-)
7,12-Dimethylbenz[a]anthracene (1,2-Benzanthracene, 7,12-dimethyl-)
3,3'Dimethylbenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-)
Dimethylcarbamoyl chloride (Carbamoyl chloride, dimethyl-)
1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl-)
1,2-Dimethylhydrazine (Hydrazine, 1,2-dimethyl-)
3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino) carbonyl]oxime (Thiofanox)
alpha,alpha-Dimethylphenethylamine (Ethanamine, 1,1-dimethyl-2-phenyl)
2,4-Dimethylphenol (Phenol, 2,4-dimethyl-)
Dimethyl phthalate (1,2-Benzenedicarboxylic, acid, dimethyl ester)

Dimethyl sulfate (Sulfuric acid, dimethyl ester)
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-)
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)
Disulfoton (O,O-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate)
2,4-Dithiobiuret (Thioimidodicarbonic diaminde)
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)
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)
Fluoranthene (Benzo[j,k]fluorene)
Fluorine
2-Fluoroacetamide (Acetamide, 2-fluoro-)
Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)
Formaldehyde (Methylene, oxide)
Formic acid (Methanoic acid)
Glycidylaldehyde (1-Propanol-2,3-epoxy)
Halomethane, N.O.S.*
Heptachlor (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-)
Heptachlor epoxide (alpha, beta, and gamma isomers) (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7-tetrahydro-, alpha, beta and gamma isomers)
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)
Iodomethane (Methyl iodide)
Isocyanic acid, methyl ester (Methyl isocyanate)
Isobutyl alcohol (1-Propanol, 2-methyl-)
Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Kepone (Decachlorooctahydro-1,3,4-Methano-2H-cyclobuta[cd]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)
Melphalan (Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-,L-)
Mercury Fulminate (Fulminic acid, mercury salt)
Mercury and compounds, N.O.S.*
Methacrylonitrile (2-Propenenitrile, 2-methyl-)
Methanethiol (Thiomethanol)
Methapyrilene (Pyridine, 2-[(2-dimethylamino)ethyl]-2-thenylamino-)
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-)
Mustard gas (Sulfide, bis(2-chloroethyl)-)
Naphthalene
1,4-Naphthoquinone (1,4-Naphthalenedione)
1-Naphthylamine (alpha-Naphthylamine)
2-Naphthylamine (beta-Naphthylamine)
1-Naphthyl-2-thiourea (Thiourea, 1-naphthalenyl-)
Nickel and compounds, N.O.S.*
Nickel carbonyl (Nickel tetracarbonyl)
Nickel cyanide (nickel (II) cyanide)
Nicotine and salts, Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts)
Nitric oxide (Nitrogen (II) oxide)
p-Nitroaniline (Benzenamine, 4-nitro-)
Nitrobenzine (Benzene, nitro-) Nitrobenzene
Nitrogen dioxide (Nitrogen (IV) oxide)
Nitrogen mustard and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-
N-methyl-, and hydrochloride salt)
Nitrogen mustard N-Oxide and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, N-oxide, and hydro-chloride salt)
Nitroglycerine (1,2,3-Propanetriol, trinitrate)
4-Nitrophenol (Phenol, 4-nitro-)
2-Nitropropane (Propane 2-nitro)
4-Nitroquinoline-1-oxide (Quinoline, 4-nitro-1-oxide-)
Nitrosamine, N.O.S.*
N-Nitrosodi-n-butylamine (1-Butanamine, N-butyl-N-nitroso-)
N-Nitrosodiethanolamine (Ethanol, 2,2'-(nitrosoimino)bis-)
N-Nitrosodiethylamine (Ethanamine, N-Ethyl-N-nitroso-)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitroso-N-ethylurea (Carbamide, N-ethyl-N-nitroso-)
N-Nitrosomethylethylamine (Ethanamine, N-methyl-N-nitroso-)
N-Nitroso-N-methylurea (Carbamide, N-methyl-N-nitroso-)
N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl ester)
N-Nitrosomethylvinylamine (Ethenamine, N-methyl-N-nitroso-)
N-Nitrosomorpholine (Morpholine, N-nitroso-)
N-Nitrosonornicotine (Nornicotine, N-nitroso-)
N-Nitrosopiperidine (Pyridine, hexahydro-, N-nitroso-)
N-Nitrosopyrrolidine (pyrrole, tetrahydro-, N-nitroso-)
N-Nitrososacrosine (Sarcosine, N-nitroso-)
5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)
Octamethylpyrophosphoramide (Diphosphoraminde, octamethyl-)
Osmium tetroxide (Osmium (VIII) oxide)
7-Ocabicyclo[2.2.1]heptane-2,3-dicarbonxylic acid (Endothal)
Paraldehyde (1,3,5-Trioxane, 2,4,6-trinethyl-)
Parathion (Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester
Pentachlorobenzene (Benzene, pentachloro-)
Pentachlorodibenzo-p-dioxins
Pentachlorodibenzofurans
Pentachloroethane (Ethane, pentachloro-)
Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-)
Pentachlorophenol (Phenol, pentachloro-)
Perchloromethyl mercaptan (Methanesulferryl chloride, trichloro-)
Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)
Phenol (Benzene, hydroxy-)
Phenylenediamine (Benzenediamine)
Phenylmercury acetate (Mercury, acetatophenyl-)
N-Phenylthiourea (Thiourea, phenyl-)
Phosgene (Carbonyl chloride)
Phosphine (Hydrogen phosphide)
Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester (Phorate)
Phosphorothioic acid, O,O-dimethyl O-[p-((dimethylamino)sulfonyl)phenyl] ester (Famphur)
Phthalic acid esters, N.O.S.* (Benzene, 1,2-dicarboxylic acid, esters, N.O.S.*
Phthalic anhydride (1,2-Benzenedicarboxylic acid anhydride)
2-Picoline (Pyridine, 2-methyl-)
Polychlorinated biphenyl, N.O.S.*
Potassium cyanide
Potassium silver cyanide (Argentate(1-), dicyano-, potassium)
Pronamide (3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide)
1,3-Propanesultone (1,2-Oxathiolane, 2,2-dioxide)
Propionic acid, 2-(2,4,5-trichlorophenoxy), salts and esters (2,4,5-TP,Silvex, salts and esters)
n-Propylamine (1-Propane)
Propylthiouracil (2,3 dihydro-6-propyl-2 thioxo-4(1H)-pyrimidinone)
2-Propyn-1-ol (Propargyl alcohol)
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)
Selenourea (Carbamimidoselenoic acid)
Silver and compounds, N.O.S.*
Silver cyanide
Sodium cyanide
Streptozotocin (D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-)
Strychnine and salts (Strychnidin-10-one, and salts)
1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro-)
Tetrachlorodibenzo-p-dioxins

Tetrachlorodibenzofurans
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) Dibenzo-p-dioxin, 2,3,7,8-tetrachloro-)
Tetrachloroethane, N.O.S.* (Ethane, tetrachloro-, N.O.S.*)
1,1,1,2-Tetrachlorethane (Ethane, 1,1,1,2-tetrachloro-)
1,1,2,2-Tetrachlorethane (Ethane, 1,1,2,2-tetrachloro-)
Tetrachlorethylene (Ethene, 1,1,2,2-tetrachloro-)[1]
Tetrachloromethane (Carbon tetrachloride)
2,3,4,6-Tetrachlorophenol (Phenol,2,3,4,6-tetrachloro-)
Tetraethyldithiopyrophosphate (Dithiopyrophosphoric acid, tetraethyl-ester)
Tetraethyl lead (Plumbane, tetraethyl-)
Tetraethylpyrophosphate (Pyrophosphoric acid, tetraethyl ester)
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)
Thiosemicarbazide (Hydrazinecarbothioamide)
Thiourea (Carbamide thio-)
Thiuram (Bis(dimethylthioucarbamoyl) disulfide)
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-)
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)
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)
Vinyl chloride (Ethane, chloro-)
Zinc cyanide
Zinc phosphide

* 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. 95-22-008 (Order 94-30), § 173-303-9905, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9905, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-9905, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-9905, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-9905, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-9905, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9905, filed 2/10/82.]

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

WAC 173-303-9906 Special waste bill of lading.

SPECIAL WASTE
BILL OF LADING
EXAMPLE

1) Receiving Facility Name: _____ phone: _____
   Address: _____ fax: _____
2) Customer Name: _____ phone: _____
   Address: _____ fax: _____
3) Property Owner Name
   (where waste originated): _____ phone: _____
   Address: _____ fax: _____
4) Hauler Name: _____ phone: _____
   Address: _____ fax: _____
5) Consultant Name: _____ phone: _____
   Address: _____ fax: _____
6) Amount of waste: _____
7) Original Location of Special Waste: _____
8) Activity Which Generated Waste: _____
9) Description of Waste. Include any Applicable Dangerous Waste Code: _____

_____

10) Does Waste Have Potential to Create Fugitive Dust? Yes _____ No _____
    If Yes, What is your Plan to Mitigate Dust?

_____

_____

11) Amount of wastes in pounds or tons: _____

SPECIAL WASTE WASTE ANALYSIS

Customer Must Initial the Appropriate Item.

____1. Wastes were designated through testing

____2. Wastes were designated by other means

Customer Certifies That:

1. The Waste sampled and intended for disposal under this Certification is special waste as defined in WAC 173-303-040.
2. The Waste has no free liquids per WAC 173-303-110 (3)(c)(i).

Signature _____ Date _____

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-9906, filed 10/19/96, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9906, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9906, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-9906, filed 6/26/87. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9906, filed 2/10/82.]

Chapter 173-360 WAC
UNDERGROUND STORAGE TANK REGULATIONS

WAC

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-360-640 Types of licenses. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-640, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-650 Examination and licensing of tank services supervisors. [Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-650, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-650, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-655 Examination and licensing of persons who perform inspections. [Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-655, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-655, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-660 Study guide fees. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-660, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-680 Reciprocity with other states. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-680, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-690 Appeals. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-690, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-695 Inactive license. [Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-695, filed 10/29/91, effective 11/29/91.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

WAC 173-360-100 Purpose and authority. (1) The purpose of this chapter is to address the serious threat posed to human health and the environment by leaking underground storage systems containing petroleum and other regulated substances.

(2) The department of ecology is directed by chapter 90.76 RCW to establish an underground storage tank program designed, operated and enforced in a manner that, at a minimum, meets the requirements for delegation of the Federal Underground Storage Tank Program of the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. Section 6901, et seq.). The legislative intent is that state-wide requirements for underground storage tanks adopted by the department be consistent with and no less stringent than the objectives outlined in the federal regulations. Because certain areas of the state possess physical characteristics that make them especially vulnerable to threats from leaking underground storage tanks, local requirements more stringent than the state-wide requirements may apply in these environmentally sensitive areas.

(Note: All codes, standards, rules, or regulations cited in this chapter are available for inspection at the Department of Ecology, P.O. Box 47655, Olympia, WA 98504-7655.)

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-100, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-100, filed 11/28/90, effective 12/29/90.]

WAC 173-360-110 Applicability, exemptions, and deferrals. (1) The requirements of this chapter apply to all owners and operators of an underground storage tank (UST) system as defined in WAC 173-360-120 except as otherwise provided in subsections (2) and (3) of this section. It is the responsibility of owners and operators to ensure that any UST supervisors they employ are properly certified in accordance with WAC 173-360-600 through 173-360-630.

(2) Exemptions. The following UST systems, including any piping connected thereto, are exempt from the requirements of this chapter:

(a) Any UST system holding hazardous wastes subject to Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances.

(b) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act.

(c) Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks.

(d) Any UST system whose capacity is one hundred ten gallons or less.

(e) Any UST system that has never contained more than a de minimis concentration of regulated substances as defined in WAC 173-360-120.

(f) Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

(g) Farm or residential UST systems of one thousand one hundred gallons or less capacity used for storing motor fuel for noncommercial purposes (see definition of "farm" and "residential");

(h) UST systems used for storing heating oil for consumptive use on the premises where stored; except that such systems which store in excess of one thousand one hundred gallons are subject to the release reporting requirements of WAC 173-360-372;

(i) Septic tanks;

(j) Any pipeline facility (including gathering lines) regulated under:

(i) The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.); or

(ii) The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.); or

(iii) Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of the law referred to in (j) (i) or (ii) of this subsection;

(k) Surface impoundments, pits, ponds, or lagoons;

(l) Storm water or wastewater collection systems;

(m) Flow-through process tanks;

(n) Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; or

(o) Storage tanks situated in an underground area (such as a basement, cellar, vault, mineworking drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

(3) Deferrals. The following UST systems are subject only to the requirements of WAC 173-360-130, 173-360-140, 173-360-160, 173-360-170, 173-360-190, 173-360-200, 173-360-372, 173-360-385 and 173-360-390. Any new deferred UST systems shall also be subject to the performance standards of WAC 173-360-300:

(a) Wastewater treatment tank systems not regulated under section 307(b) or 402 of the Clean Water Act;

(b) Any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.);

(c) Any UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR Part 50 Appendix A;

(d) Airport hydrant fuel distribution systems;

(e) UST systems with field-constructed tanks.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-110, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-110, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-110, filed 11/28/90, effective 12/29/90.]

WAC 173-360-120 Definitions. For the purposes of this chapter, the following definitions shall apply:

"Abandoned" means left unused indefinitely, without being substantially emptied or permanently altered structurally to prevent reuse.

"Aboveground release" means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the above-ground portion of an UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system.

"Accidental release" means any sudden or nonsudden release of petroleum from an underground storage tank that results in a need for corrective action and/or compensation for bodily injury or property damage neither expected nor intended by the tank owner or operator.

"Ancillary equipment" means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of regulated substances to and from an UST.

"Belowground release" means any release to the subsurface of the land and/or to ground water. This includes, but is not limited to, releases from the belowground portions of an underground storage tank system and belowground releases associated with overfills and transfer operations as the regulated substance moves to or from an underground storage tank.

"Beneath the surface of the ground" means beneath the ground surface or otherwise covered with earthen materials.

"Bodily injury" shall have the meaning given to this term by applicable state law; however, this term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for bodily injury.

"Cathodic protection" means a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

"Certified UST supervisor" means a person certified by the International Fire Code Institute or another nationally recognized organization, as approved by the department. Washington registered professional engineers who are competent, by means of examination, experience, or education, to perform site assessments, are not required to be certified for site assessment work.

"Closure" means to take an underground storage tank out of operation, either temporarily or permanently, in accordance with WAC 173-360-380 or 173-360-385. The term is synonymous with "decommissioning."

"Compatible" means the ability of two or more substances or materials to maintain their respective physical and chemical properties upon contact with one another such that the stored substance will not pass through the wall or lining of the tank and connected piping for the design life of the tank system under conditions likely to be encountered in the UST.

"Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.

"Consumptive use" with respect to heating oil means consumed on the premises.

"Controlling interest" means direct ownership of at least fifty percent of the voting stock of another entity.

"Corrosion expert" means a person who possesses a thorough knowledge of the physical sciences and the

principles of engineering and mathematics acquired by a professional education and related practical experience, and is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

"Decommissioning" means to take an underground storage tank out of operation, either temporarily or permanently, in accordance with WAC 173-360-380 or 173-360-385. The term is synonymous with "closure."

"Deferral" means a category of UST systems which are subject to certain, but not all, of the requirements of this chapter as specified in WAC 173-360-110(3).

"Delegated agency" means a state or local government agency which has been delegated responsibility by the department for administering any portion of an UST program.

"De minimis concentration" means either less than one inch of regulated substance, or less than a reportable quantity, as defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

"Department" means the department of ecology.

"Dielectric material" means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate UST systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the UST system (e.g., tank from piping).

"Director" means the director of the department of ecology.

"Electrical equipment" means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

"Emergency power generator" means an engine that uses fuel to produce auxiliary electrical or mechanical energy for use in emergencies.

"Emergency power generator tank" means a tank that stores fuel solely for use by an emergency power generator.

"Excavation zone" means the volume containing the UST system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

"Existing UST system" means an UST system used to contain an accumulation of regulated substances or for which installation had commenced on or before December 22, 1988. Installation is considered to have commenced if: The owner or operator had obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system; and if

Either a continuous on-site physical construction or installation program had begun; or

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

"False alarm" means indicating that an UST system is leaking when in fact it is tight.

"Farm tank" is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank must be located on the farm property and used for farm purposes. "Farm" includes fish hatcheries, rangeland, and nurseries with growing operations. It does not include laboratories where animals are raised, land used to grow timber, pesticide aviation operations, retail stores or garden centers where nursery products are marketed but not grown, cemeteries, golf courses, or other facilities dedicated primarily to recreation or aesthetics, or other non-agricultural activities.

"Field-constructed tank" means an underground storage tank that is constructed in the field rather than factory built because of its large size.

"Financial reporting year" means the latest consecutive twelve-month period for which any of the following reports used to support a financial test is prepared: A 10-K report submitted to the SEC; an annual report of tangible net worth submitted to Dun and Bradstreet; or annual reports submitted to the Energy Information Administration or the Rural Electrification Administration. "Financial reporting year" may thus comprise a fiscal or a calendar year period.

"Firm" means any business, including but not limited to corporations, limited partnerships, and sole proprietorships, engaged in performing tank services.

"Flow-through process tank" is a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

"Free product" refers to a regulated substance that is present as a nonaqueous phase liquid (e.g., liquid not dissolved in water).

"Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"Hazardous substance UST system" means an underground storage tank system that contains a hazardous substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C) or any mixture of such substances and petroleum, and which is not a petroleum UST system.

"Heating oil" means petroleum that is No. 1, No. 2, No. 4—light, No. 4—heavy, No. 5—light, No. 5—heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.

"Hydraulic lift tank" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

"Immiscible" means largely incapable of blending or mixing.

"Installation" means the activity of placing an underground storage tank system or any part thereof in the ground and preparing it to be placed in service.

"Legal defense cost" is any expense that an owner or operator or provider of financial assurance incurs in defending against claims or actions brought: By the United States Environmental Protection Agency (EPA) or a state to require corrective action or to recover the costs of corrective action; by or on behalf of a third party for bodily injury or property damage caused by an accidental release; or by any person to enforce the terms of a financial assurance mechanism.

"Liquid trap" means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

"Maintenance" means the normal operational upkeep to prevent an underground storage tank system from releasing a regulated substance.

"Motor fuel" means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any grade of gasohol, and is typically used in the operation of a motor engine.

"New UST system" means a tank system that will be used to contain an accumulation of regulated substances and for which installation commenced after December 22, 1988. (See also "existing tank system.")

"Noncommercial purposes" with respect to motor fuel means not for resale.

"Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in a release from an underground storage tank.

Note: This definition is intended to assist in the understanding of WAC 173-360-400 through 173-360-499 and is not intended either to limit the meaning of "occurrence" in a way that conflicts with standard insurance usage or to prevent the use of other standard insurance terms in place of "occurrence."

"On the premises where stored" with respect to heating oil means UST systems located on the same property where the stored heating oil is used.

"Operational life" refers to the period beginning when installation of the tank system has commenced until the time the tank system is properly closed under WAC 173-360-380 through 173- 360-398.

"Operator" means any person in control of, or having responsibility for, the daily operation of the UST system.

"Overfill release" is a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment.

"Owner" means: In the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who owns an UST system used for storage, use, or dispensing of regulated substances; and in the case of any UST system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use. In the event that the owner of an UST system cannot be physically located, the owner shall be the person who owns the property where the UST system is located, except any lien holder and any agency of the state or unit of local government which acquired ownership or control involuntarily through bankruptcy, tax delinquency, abandonment, or circumstances in which the government involuntarily acquires title. This exclusion does not apply to an agency of the state or unit of local government which has caused or contributed to a release or threatened release of a regulated substance from the UST system.

"Owner or operator," means, for the purposes of WAC 173-360-400 through 173-360-499, when the owner or operator are separate parties, the party that is responsible for obtaining or has obtained financial assurances.

"Party" means a person or group concerned or having or taking part in any affair, matter, transaction, or proceeding.

"Permanently closed" means: (1) In the case of an UST system taken out of operation before December 22, 1988, the UST system was substantially emptied of regulated substances or permanently altered structurally to prevent reuse; (2) in the case of an UST system taken out of operation after December 21, 1988, and before the effective date of this chapter, the UST system was closed in accordance with 40 CFR 280; and (3) in the case of an UST system taken out of operation on or after the effective date of this chapter, the UST system was closed in accordance with WAC 173-360-385.

"Person" means an individual, trust, firm, joint stock company, federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body. "Person" also includes a consortium, a joint venture, a commercial entity, and the United States government.

"Petroleum marketing facilities" include all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public.

"Petroleum marketing firms" are all firms owning petroleum marketing facilities. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms.

"Petroleum UST system" means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

"Pipe" or "piping" means a hollow cylinder or tubular conduit that is constructed of nonearthen materials.

"Pipeline facilities (including gathering lines)" are new and existing pipe rights-of-way and any associated equipment, facilities, or buildings.

"Property damage" shall have the meaning given this term by applicable state law. This term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for property damage. However, such exclusions for property damage shall not include corrective

action associated with releases from tanks which are covered by the policy.

"Provider of financial assurance" means an entity that provides financial assurance to an owner or operator of an underground storage tank through one of the mechanisms listed in WAC 173-360-413 through 173-360-436, including a guarantor, insurer, risk retention group, surety, issuer of a letter of credit, issuer of a state-required mechanism, or a state.

"Regulated substance" means:

Any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and any other regulated substances); and

Petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (sixty degrees Fahrenheit and 14.7 pounds per square inch absolute). The term "regulated substance" includes but is not limited to petroleum and petroleum-based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils. The term "regulated substance" does not include propane or asphalt or any other petroleum product which is not liquid at standard conditions of temperature and pressure.

"Release" means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an UST system to ground water, surface water or soils.

"Release detection" means determining whether a release of a regulated substance has occurred from the UST system into the environment or into the interstitial space between the UST system and its secondary barrier or secondary containment around it.

"Repair" means to restore a tank or UST system component that has caused a release of a regulated substance from the UST system.

"Residential tank" is a tank located on property used primarily for dwelling purposes; such properties do not include dormitories, convents, mobile parks, apartments, hotels and similar facilities, unless the tank is used by the owner solely for his or her own personal use, rather than to maintain the overall facility.

"Retrofitting" means the repair or upgrading of an existing underground storage tank system including, but not limited to, installation of splash, spill and overfill protection, installing or replacing monitoring systems, adding cathodic protective systems, tank repair, replacement of piping, valves, fill pipes or vents and installing tank liners.

"Septic tank" is a water-tight covered receptacle designed and used to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

"Site assessment" means investigating an UST site for the presence of a release at the time of closure or change-in-service.

"Site check" means investigating an UST site for the presence of a release when evidence indicates that a release may have occurred.

"Stormwater or wastewater collection system" means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

"Structural defect" means a hole or crack in the tank portion of the UST system, which has either caused a release from the system or is being repaired to prevent a release from the system.

"Substantial business relationship" means the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued "incident to that relationship" if it arises from and depends on existing economic transactions between the guarantor and the owner or operator.

"Supervisor" means a person certified by the International Fire Code Institute, or other nationally recognized organization, operating independently or employed by a contractor, who is responsible for directing and overseeing the performance of tank services at a facility.

"Surface impoundment" is a natural topographic depression, excavation, or diked area formed primarily of earthen materials (although it may be lined with synthetic materials) that is not an injection well.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition, "assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.

"Tank" is a stationary device designed to contain an accumulation of regulated substances and constructed of nonearthen materials (e.g., concrete, steel, plastic) that provide structural support.

"Tank permit" means a tank tag, as required by RCW 90.76.020(4).

"Tank services" include underground storage tank installation, decommissioning, retrofitting, and testing.

"Termination" under WAC 173-360-476 and 173-360-480 means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.

"Testing" means applying a method to determine the integrity of an underground storage tank.

"Tightness testing" means a procedure for testing the ability of a tank system to prevent an inadvertent release of any stored substance into the environment or, intrusion of ground water into a tank system.

"Underground area" means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

"Underground release" means any below ground release.

"Underground storage tank" or "UST" means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is ten percent or more beneath the surface of the ground. This term does not include any of the exempt UST systems specified in WAC 173-360-110(2), or any piping connected thereto.

"Upgrade" means the addition or retrofit of some systems such as cathodic protection, lining, or spill and overfill controls to improve the ability of an underground storage tank system to prevent the release of regulated substances.

"UST site" or "site" means the location at which underground storage tanks are in place or will be placed. An UST site encompasses all of the property within a contiguous ownership that is associated with the use of the tanks.

"UST system" or "tank system" means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any.

"Wastewater treatment tank" means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-120, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-120, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-120, filed 11/28/90, effective 12/29/90.]

WAC 173-360-130 Tank permits and delivery of regulated substances. (1) Requirement for a permit. After July 1, 1991, no underground storage tank system, as defined in this chapter, shall be operated without a valid permit from the department or its delegated agency. However, possession of a valid permit does not preclude enforcement against the owner or operator of the underground storage tank under this or other laws.

(2) Application for a permit. Permits for UST systems shall be obtained as follows:

(a) To apply for a permit for a new UST system the owner or operator shall complete an UST notification form, as specified in WAC 173-360-200(2) and submit it with payment of the applicable annual fee, as specified in WAC 173-360-190, to the delegated agency. If no delegated agency exists, the application shall be submitted to the department.

(b) To apply for a permit for an existing UST system not previously reported to the department, the owner or operator shall complete a Washington state underground storage tank notification form, as specified in WAC 173-360-200(2), and submit it to the delegated agency with a payment of the applicable annual fee, as specified in WAC 173-360-190, including any fees which should have been paid for earlier fiscal years if the UST system had been properly registered, but which were not paid. If no delegated agency exists, the application shall be made to the department.

(c) To apply for a permit for a tank which has been temporarily out of service, the owner or operator shall notify the department of the change in status and follow the provisions of WAC 173-360-380.

(d) Each year the department will request owners and operators of reported UST systems to certify compliance with the requirements of this chapter. UST systems which are in the department's notification data base when the department requests this certification will receive permits by July 1 of each year if:

(i) Adequate documentation of compliance, as specified by the department, is submitted to the delegated agency, or, if no delegated agency exists, to the department; and

(ii) Applicable fees have been paid.

(3) Eligibility for a permit. Tanks which are temporarily closed under WAC 173-360-380 are not eligible to receive permits. Underground storage tank systems are eligible for a permit if the following conditions are met:

(a) The owner or operator is in compliance with all requirements of this chapter, including the financial responsibility requirements, and chapter 173-340 WAC, if applicable, or the owner or operator is in conformance with a compliance schedule negotiated with and agreed to by the department;

(b) The storage tank system is not known by the owner or operator to be leaking; and

(c) All annual state tank fees and local environmentally sensitive area tank fees have been remitted.

(4) Delivery of regulated substances. Regulated substances shall not be delivered to any underground storage tank requiring a permit under this section unless a valid permit is displayed on such tank itself or the dispensing or measuring device connected thereto or, where appropriate, in the office or kiosk of the facility where the tank is located or unless otherwise authorized in writing by the department. This subsection applies only to suppliers who directly transfer regulated substances into underground storage tank systems.

(5) Waste oil tanks. Tanks used to collect and store used or waste oil regulated under this chapter shall not be pumped by a used or waste oil collector unless a valid permit is displayed on such tank itself or a device connected thereto or, where appropriate, in the office or kiosk of the facility where the tank is located. This prohibition does not apply to a one-time removal of substances from tanks which will not be used again for the storage of used or waste oil once the substances are removed; such tanks must be properly closed or undergo the procedures for a change-in-service in accordance with WAC 173-360-385. This subsection applies only to used or waste oil collectors who directly transfer regulated substances from underground storage tanks.

(6) Delivery prohibited to leaking tanks. Suppliers shall not deliver regulated substances to any underground storage tank which is known by the supplier to be leaking, or to have leaked and not been properly repaired, regardless of the permit status of the tank.

(7) Delivery of regulated substances. If a confirmed release occurs from a permitted tank, in addition to meeting the reporting requirements of WAC 173-360-372, within twenty-four hours of having knowledge of the release the

owner or operator shall lock the fill pipe and remove from display the permit for the tank from which the release has occurred. At no time can the owner or operator receive regulated substances, until all the applicable requirements of this chapter and chapter 173-340 WAC have been met. If the department determines that reasonable progress is not being made in meeting these requirements it may request that the owner or operator surrender the permit, as specified in subsection (8) of this section, for the tank from which the release occurred.

(8) Permit revocation. The department may request the surrender of a permit for any tank which does not remain in compliance with the requirements of this chapter, including financial responsibility requirements and payment of fees, or for any violation of the chapter by an underground storage tank owner or operator, including refusal of access to property under WAC 173-360-140. Upon request of a representative of the department or delegated agency or upon receipt of a letter from the department or delegated agency requesting surrender of the permit, the owner or operator must return the permit to the department or delegated agency within seven days.

(9) When a tank is closed, any active permit must be returned to ecology within thirty days of the completion of the closure procedures.

(10) Appeals. The revocation of a permit may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-130, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-130, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-130, filed 11/28/90, effective 12/29/90.]

WAC 173-360-190 Annual tank fees. An annual state tank fee of seventy-five dollars per tank shall be paid by every person who owns an underground storage tank which:

(1) Is located in this state;

(2) Was required to be reported to the department under the Federal Underground Storage Tank Program of the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. Section 6901, et seq.);

(3) Is not permanently closed according to the requirements of this chapter as of the billing date; and

(4) If required, for which corrective action has not been completed in accordance with this chapter.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-190, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-190, filed 11/28/90, effective 12/29/90.]

WAC 173-360-200 Notification requirements. (1) Notice of intent to install a new UST system. Except in the circumstances defined in subsection (5) of this section, any owner who intends to install a new UST system shall submit a notice of such intent to the department or delegated agency at least thirty days and not more than ninety days prior to installing the UST system. Such notice shall meet the following requirements:

(a) The notice of intent shall be provided on the appropriate Washington state form, which is available from the department;

(b) Each UST system to be installed which is regulated under this chapter shall be reported;

(c) Owners may provide notice for more than one UST system using a single form, but UST systems to be installed at separate sites shall be reported on separate forms; and

(d) The completed form shall include all of the information required on the form.

(2) Notification of new UST systems in use. Within thirty days of bringing any newly installed UST system regulated under this chapter into use, the owner shall submit notice of such UST system to the department. This notice shall meet the following requirements:

(a) The notice shall be provided on the appropriate Washington state underground storage tank notification form, which is available from the department;

(b) Each tank regulated under this chapter shall be reported;

(c) Owners may provide notice for more than one tank using a single notification form, but owners who own tanks located at more than one site shall file a separate notification form for each site;

(d) Notification required under this section shall include all of the information required on the form for each tank for which notice must be given; and

(e) Notification for tanks installed after December 22, 1988, shall also certify compliance with the following requirements:

(i) Corrosion protection of steel tanks and piping under WAC 173-360-305 (1) and (2);

(ii) Financial responsibility under WAC 173-360-400 through 173-360-499; and

(iii) Release detection under WAC 173-360-335 and 173-360-340.

(3) Certification of installation. All owners and operators of new UST systems shall ensure that the methods used to install the tanks and piping comply with the requirements in WAC 173-360-305(4). Such certification shall be accomplished by completing a notification form, which is available from the department, as specified in WAC 173-360-305(5). The form must be signed by the certified UST supervisor.

(4) Notification of existing UST systems. Owners of any existing UST system regulated under this chapter which has not previously been reported to the department shall provide notification regarding such UST system immediately, following the requirements of subsection (2) (a) through (e) of this section.

Note: Owners and operators of UST systems that were in the ground on or after May 8, 1986, unless taken out of operation on or before January 1, 1974, were required to notify the department in accordance with the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, on a form published by Washington state unless notice was given pursuant to section 103(c) of CERCLA.

(5) Emergency replacement of UST systems.

(a) An exception to the thirty-day notice requirement for new installations in subsection (1) of this section is allowed when an UST system is being replaced on an emergency basis due to a release from the system being replaced. An emergency shall be regarded as a newly discovered release from an UST system which is:

(i) In operation at the time of the release;

(ii) Located at an operating facility; and

(iii) Necessary for the normal operation of the facility.

(b) Under the circumstances described in (a) of this subsection, the notice of intent to install an UST system may be provided after the installation of the new system but no more than seven days after the installation is completed. The information which must be included in the notice of intent form is the same as in subsection (1) of this section. A site assessment meeting the requirements of WAC 173-360-390 shall be completed prior to installing a tank in the excavation pit of a tank being replaced and prior to installing new piping in the piping trench of piping being replaced.

(6) Changes to UST systems. Any changes in the information initially reported in the notification form submitted under subsection (2), (4) or (5) of this section, including temporary closure of an UST system that was initially reported as being in use, shall be reported to the department or delegated agency by submitting a new notification form within thirty days after such changes occur.

(7) Beginning October 24, 1988, any person who sells a new tank which is intended to be used as an underground storage tank, or an existing UST system or property including an existing UST system which is intended to be used as an UST system, shall notify the purchaser of such tank or UST system of the owner's notification obligations under this section.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-200, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-200, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-200, filed 11/28/90, effective 12/29/90.]

WAC 173-360-210 Reporting and recordkeeping requirements. Owners and operators of UST systems shall cooperate fully with inspections, monitoring, and testing conducted by the department or delegated agency, as well as requests for document submission, testing, and monitoring by the owner or operator pursuant to RCW 90.76.060.

(1) Reporting. Owners and operators shall submit the information specified in (a) through (e) of this subsection to the department or delegated agency:

(a) Notification for all UST systems (WAC 173-360-200), which includes certification of installation for new UST systems (WAC 173-360-305(5));

(b) Reports of all suspected releases (WAC 173-360-360), confirmed releases (WAC 173-360-372), and spills and overfills (WAC 173-360-375);

(c) Reports required for corrective actions under chapter 173-340 WAC;

(d) A notification before permanent closure or change-in-service (WAC 173-360-385); and

(e) The appropriate forms, certificates of compliance, and evidence of financial responsibility (WAC 173-360-446).

(f) Checklists required for tank service activities, site checks, and site assessments shall be signed by certified UST supervisors and submitted to the department by the owner or operator.

(2) Recordkeeping. Owners and operators shall maintain the following information:

(a) Documentation of operation of corrosion protection equipment (WAC 173-360-320);

(b) Documentation of UST system repairs (WAC 173-360-325(7));

(c) Recent compliance with release detection requirements (WAC 173-360-355);

(d) Results of the site assessment conducted at permanent closure (WAC 173-360-398);

(e) Corrective action records in accordance with chapter 173-340 WAC; and

(f) Evidence of financial assurance mechanisms used to demonstrate financial responsibility (WAC 173-360-450).

(3) Availability and maintenance of records. Owners and operators shall keep the records required either:

(a) At the UST site and immediately available for inspection by the department or delegated agency; or

(b) At a readily available alternative site and be provided for inspection to the department or delegated agency upon request.

(c) In the case of permanent closure records required under WAC 173-360-398, owners and operators are also provided with the additional alternative of mailing closure records to the department or delegated agency if they cannot be kept at the site or an alternative site as indicated above.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-210, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-210, filed 11/28/90, effective 12/29/90.]

WAC 173-360-305 Performance standards for new UST systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, all owners and operators of new UST systems shall meet the following requirements:

(1) Tanks. Each tank shall be properly designed and constructed with material that is compatible with and impermeable to the stored substance, and any portion underground that routinely contains regulated substances shall be protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified under (a) through (d) below:

(a) The tank is constructed of fiberglass-reinforced plastic; or

Note: The following industry codes may be used to comply with subsection (1)(a) of this section: Underwriters Laboratories Standard 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products"; Underwriter's Laboratories of Canada CAN4-S615-M83, "Standard for Reinforced Plastic Underground Tanks for Petroleum Products"; or American Society of Testing and Materials Standard D4021-86, "Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks."

(b) The tank is constructed of steel and cathodically protected in the following manner:

(i) The tank is coated with a suitable dielectric material;

(ii) The tank is equipped with a factory-installed or field-installed cathodic protection system designed by a corrosion expert;

(iii) Cathodic protection systems are designed and installed to include provisions for testing to allow a determination of current operating status as required in WAC 173-360-320(2) and to facilitate testing by the department or delegated agency in accordance with WAC 173-360-325 (5) and (6); and

(iv) Cathodic protection systems are operated and maintained in accordance with WAC 173-360-320 or according to guidelines established by the department or delegated agency; or

Note: The following codes and standards may be used to comply with subsection (1)(b) of this section:

(A) Steel Tank Institute "Specification for STI-P3 System of External Corrosion Protection of Underground Steel Storage Tanks";

(B) Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks";

(C) Underwriters Laboratories of Canada CAN4-S603-M85, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," and CAN4-G03.1-M85, "Standard for Galvanic Corrosion Protection Systems for Underground Tanks for Flammable and Combustible Liquids," and CAN4-S631-M84, "Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems"; or

(D) National Association of Corrosion Engineers Standard RP- 02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and Underwriters Laboratories Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids."

(c) The tank is constructed of a steel-fiberglass-reinforced- plastic composite; or

Note: The following industry codes may be used to comply with subsection (1)(c) of this section: Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks," or the Association for Composite Tanks ACT-100, "Specification for the Fabrication of FRP Clad Underground Storage Tanks."

(d) The tank construction and corrosion protection are determined by the department or delegated agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than subsection (1)(a) through (c) of this section.

(2) Piping. The piping that routinely contains regulated substances and is in contact with the ground shall be properly designed and constructed with material that is compatible with and impermeable to the stored substance, and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:

(a) The piping is constructed of fiberglass-reinforced plastic; or

Note: The following codes and standards may be used to comply with subsection (2)(a) of this section:

(i) Underwriters Laboratories Subject 971, "UL Listed Non- Metal Pipe";

(ii) Underwriters Laboratories Standard 567, "Pipe Connectors for Flammable and Combustible and LP Gas";

(iii) Underwriters Laboratories of Canada Guide ULC-107, "Glass Fiber Reinforced Plastic Pipe and Fittings for Flammable Liquids"; and

(iv) Underwriters Laboratories of Canada Standard CAN 4-S633- M81, "Flexible Underground Hose Connectors."

(b) The piping is constructed of steel and cathodically protected in the following manner:

(i) The piping is coated with a suitable dielectric material;

(ii) Field-installed cathodic protection systems are designed by a corrosion expert;

(iii) Cathodic protection systems are designed and installed to include provisions for testing to allow a determination of current operating status as required in WAC 173-360-320(2) and to facilitate testing by the department or delegated agency in accordance with WAC 173-360-325 (5) and (6); and

(iv) Cathodic protection systems are operated and maintained in accordance with WAC 173-360-320 or guidelines established by the department or delegated agency; or

Note: The following codes and standards may be used to comply with subsection (2)(b) of this section:

(A) National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code";

(B) American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems";

(C) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"; and

(D) National Association of Corrosion Engineers Standard RP- 01-69, "Control of External Corrosion on Submerged Metallic Piping Systems."

(c) The piping construction and corrosion protection are determined by the department or delegated agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in subsection (2)(a) and (b) of this section.

(d) Metal flexible underground hose connectors shall be cathodically protected or covered with sleeves or jackets that will provide corrosion protection over the operating life of the UST system.

(3) Spill and overfill prevention equipment.

(a) Except as provided in subsection (3)(b) of this section, to prevent spilling and overfilling associated with transfer of regulated substances to the UST system, owners and operators shall use the following spill and overfill prevention equipment:

(i) Spill prevention equipment that will prevent release of regulated substances to the environment when the transfer hose is detached from the fill pipe (for example, a spill catchment basin); and

(ii) Overfill prevention equipment that will:

(A) Automatically shut off flow into the tank when the tank is no more than ninety-five percent full;

(B) Alert the transfer operator when the tank is no more than ninety percent full by restricting the flow into the tank or triggering a high-level alarm; or

(C) Restrict flow thirty minutes prior to overfilling, alert the operator with a high level alarm one minute before overfilling, or automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to regulated substances due to overfilling.

Note: Overflow prevention equipment that will automatically shut off or restrict flow into the tank should not be used where a pressurized fuel transfer system may be employed since an

overflow may occur when the flow is suddenly shut off or restricted.

(b) Owners and operators are not required to use the spill and overfill prevention equipment specified in subsection (3)(a) of this section if:

(i) Alternative equipment is used that is determined by the department or delegated agency to be no less protective of human health and the environment than the equipment specified in subsection (3)(a)(i) or (ii) of this section; or

(ii) The UST system is filled by transfers of no more than twenty-five gallons at one time.

(4) Installation. All tanks and piping shall be properly installed by an UST supervisor who is certified in tank system installation in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions.

Note: Tank and piping system installation practices and procedures described in the following codes may be used to comply with the requirements of subsection (4) of this section:

(a) American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage System"; or

(b) Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems"; or

(c) American National Standards Institute Standard B31.3, "Petroleum Refinery Piping," and American National Standards Institute Standard B31.4 "Liquid Petroleum Transportation Piping System."

(5) Certification of installation. All owners and operators shall ensure compliance with subsection (4) of this section by submitting a properly completed notification form to the delegated agency, or, if no delegated agency exists, to the department. The form must be signed by a certified UST supervisor.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-305, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-305, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-305, filed 11/28/90, effective 12/29/90.]

WAC 173-360-310 Upgrading requirements for existing UST systems. (1) Alternatives allowed. Not later than December 22, 1998, all existing UST systems shall comply with one of the following requirements:

(a) New UST system performance standards under WAC 173-360-305;

(b) The upgrading requirements in subsections (2) through (4) of this section; or

(c) Closure requirements under WAC 173-360-380 through 173- 360-398, including applicable requirements for corrective action under WAC 173-360-399.

(2) Tank upgrading requirements. Steel tanks shall be upgraded by a certified UST supervisor to meet one of the following requirements in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory:

(a) Interior lining. A tank may be upgraded by internal lining if:

(i) The lining is installed in accordance with the requirements of WAC 173-360-325; and

(ii) Within ten years after lining, and every five years thereafter, the lined tank is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications, unless cathodic protection is also installed within ten years of lining the tank, as specified in WAC 173-360-310 (2)(c).

(b) Cathodic protection. A tank may be upgraded by cathodic protection if the cathodic protection system meets the requirements of WAC 173-360-305 (1)(b)(ii), (iii), and (iv) and the integrity of the tank is ensured using one of the following methods:

(i) The tank is internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes prior to installing the cathodic protection system; or

(ii) The tank has been installed or internally lined for less than ten years and is monitored monthly for releases in accordance with WAC 173-360-345 (6)(e) through (j); or

(iii) The tank has been installed or internally lined for less than ten years and is assessed for corrosion holes by conducting two tightness tests that meet the requirements of WAC 173-360-345 (6)(d). The first tightness test shall be conducted prior to installing the cathodic protection system. The second tightness test shall be conducted between three and six months following the first operation of the cathodic protection system; or

(iv) The tank is assessed for corrosion holes by a method that is determined by the department or delegated agency to prevent releases in a manner that is no less protective of human health and the environment than subsection (2)(b)(i) through (iii) of this section.

(c) Internal lining combined with cathodic protection. A tank may be upgraded by both internal lining and cathodic protection if:

(i) The lining is installed in accordance with the requirements of WAC 173-360-325; and

(ii) The cathodic protection system is installed within ten years of the tank being lined and meets the requirements of WAC 173-360-305 (1)(b)(ii), (iii), and (iv).

Note: The following codes and standards may be used to comply with this section:

(A) American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks";

(B) National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection";

(C) National Association of Corrosion Engineers Standard RP- 02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems";

(D) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"; and

(E) Steel Tank Institute Publication STI F894-91 "Specifications for External Corrosion Protection FRP Composite Underground Steel Storage Tanks."

(3) Piping upgrading requirements. Metal piping that routinely contains regulated substances and is in contact with the ground shall be cathodically protected in accordance with

a code of practice developed by a nationally recognized association or independent testing laboratory and shall meet the requirements of WAC 173-360-305 (2)(b)(ii), (iii), and (iv).

Note: The codes and standards listed in the note following WAC 173-360-305 (2)(b) may be used to comply with this requirement.

(4) Spill and overfill prevention equipment. To prevent spilling and overfilling associated with transfer of regulated substances to the UST system, all existing UST systems shall comply with new UST system spill and overfill prevention equipment requirements specified in WAC 173-360-305(3), except that an UST system that is filled by transfers of no more than twenty-five gallons at a time is not required to use spill and overfill prevention equipment.

(5) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-310, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-310, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-310, filed 11/28/90, effective 12/29/90.]

WAC 173-360-320 Operation and maintenance of corrosion protection. All owners and operators of steel UST systems with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented for as long as the UST system is used to store regulated substances:

(1) All corrosion protection systems shall be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are in contact with the ground.

(2) All UST systems equipped with cathodic protection systems shall be inspected for proper operation by an UST supervisor who is certified in cathodic protection in accordance with the following requirements:

(a) Frequency. All cathodic protection systems shall be tested when they are installed, and again between one and six months after installation, and at least every three years thereafter or according to another reasonable time frame established by the department or delegated agency; and

(b) Inspection criteria. The criteria that are used to determine that cathodic protection is adequate as required by this section shall be in accordance with a code of practice developed by a nationally recognized association.

Note: National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," may be used to comply with subsection (2)(b) of this section.

(3) UST systems with impressed current cathodic protection systems shall also be inspected every 60 days to ensure the equipment is running properly.

(4) For UST systems using cathodic protection, records of the operation of the cathodic protection shall be maintained to demonstrate compliance with the performance standards in this section. These records shall provide the following:

(a) The results of the last three inspections required in subsection (3) of this section; and

(b) The results of testing from the last two inspections required in subsection (2) of this section.

(5) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-320, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-320, filed 11/28/90, effective 12/29/90.]

WAC 173-360-325 Repairs of UST systems. Repairs to UST systems shall be performed by a certified UST supervisor. Owners and operators of UST systems shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. Any UST system which is repaired to correct a structural defect must also be upgraded at the time of the repair to meet the requirements specified in WAC 173-360-310 (1)(a) or (b), and must employ a method of release detection for the tank as specified in WAC 183-360-335, 173-360-340 or 173-360-345, as applicable, and a method of release detection for the piping as specified in WAC 173-360-350. The repairs shall meet the following requirements:

(1) Repairs to UST systems shall be properly conducted by an UST supervisor certified in tank installation and retrofitting in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

Note: The following codes and standards may be used to comply with subsection (1) of this section: National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"; American Petroleum Institute Publication 2200, "Repairing Crude Oil, Liquified Petroleum Gas, and Product Pipelines"; American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks"; and National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection."

(2) Repairs to fiberglass-reinforced plastic tanks shall be made in accordance with the manufacturer's specifications or a code of practice developed by a nationally recognized association or an independent testing laboratory.

(3) Metal pipe sections and fittings that have released regulated substances as a result of corrosion or other damage shall be replaced. Fiberglass pipes and fittings may be repaired in accordance with the manufacturer's specifications.

(4) Repaired tanks and piping shall be tightness tested in accordance with WAC 173-360-345 (6)(d) and 173-360-350 (3)(b) within thirty days following the date of the completion of the repair except as provided in subsection (4)(a) through (c), of this section:

(a) The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory; or

(b) The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in WAC 173-360-345 (6)(e) through (j); or

(c) Another test method is used that is determined by the department or delegated agency to be no less protective of human health and the environment than those listed above.

(5) Except as specified in subsection (6) of this section, within six months following the repair of any cathodically protected UST system, the cathodic protection system shall be tested in accordance with WAC 173-360-320 (2) and (3) to ensure that it is operating properly.

(6) Any repair to a cathodic protection system shall be tested in accordance with WAC 173-360-320 (2) and (3), at the time of the repair and again between one and six months following the repair.

(7) UST system owners and operators shall maintain records of each repair for the remaining operating life of the UST site that demonstrate compliance with the requirements of this section.

(8) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-325, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-325, filed 11/28/90, effective 12/29/90.]

WAC 173-360-330 Release detection compliance schedule. Owners and operators of all UST systems shall comply with the release detection requirements of WAC 173-360-330 through 173-360-355 by December 22 of the year listed in the following table:

TABLE: SCHEDULE FOR PHASE-IN OF RELEASE DETECTION

Year System was installed	Year when release detection is required (by December 22 of the year indicated)						
	1989	1990	1991	1992	1993	1994	1995
Before 1965 or date unknown.	RD	P	E				
1965-69..		P/RD		E			
1970-74..		P	RD		E		
1975-79..		P		RD		E	
1980-88..		P			RD		E

New tanks (after December 22, 1988,) immediately upon installation, except that emergency generator tanks installed between 1989 and 1990 must have release detection by 1996 and emergency generator tanks installed after December 29, 1990, must have release detection immediately upon installation.

P- Except for pressurized piping associated with emergency power generator tanks, release detection required by December 22, 1990.

RD- Except for emergency power generator tanks, must begin release detection for tanks and suction piping in accordance with WAC 173-360-335 (2)(a), 173-360-350 (2)(b), and 173-360-340.

E- Must begin release detection for emergency power generator tanks and piping in accordance with WAC 173-360-335 (2)(a) and 173-360-350 (2)(a) or (b).

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-330, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-330, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-330, filed 11/28/90, effective 12/29/90.]

WAC 173-360-335 Release detection for petroleum UST systems. (1) Owners and operators of new and existing petroleum UST systems shall provide a method, or combination of methods, of release detection that:

(a) Can detect a release from any portion of the tank and the connected underground piping that routinely contains a regulated substance;

(b) Is installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition; and

(c) Meets the performance requirements in WAC 173-360-345 or 173-360-350.

(2) Owners and operators of petroleum UST systems shall monitor tanks and piping for releases as follows:

(a) Tanks. Tanks shall be monitored at least every thirty days for releases using one of the methods listed in WAC 173-360-345 (6)(e) through (j) except as provided in WAC 173-360-345 (2) through (5).

(b) Piping. Underground piping that routinely contains regulated substances shall be monitored for releases as required under WAC 173-360-350.

(3) Owners and operators of any existing UST system that cannot apply a method of release detection that complies with the applicable requirements of WAC 173- 360-330 through 173-360-355 shall complete the closure procedures in WAC 173-360-380 through 173-360-398 by the date on which release detection is required for that UST system under WAC 173-360-330.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-335, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-335, filed 11/28/90, effective 12/29/90.]

WAC 173-360-340 Release detection for hazardous substance UST systems. Owners and operators of hazardous substance UST systems shall provide release detection that meets the following requirements:

(1) Release detection at existing hazardous substance UST systems shall meet the requirements for petroleum UST systems in WAC 173-360-335. By December 22, 1998, all existing hazardous substance UST systems shall meet the release detection requirements for new systems in subsection (2) of this section.

(2) Release detection at new hazardous substance UST systems shall employ some method of release containment such as secondary containment systems, double-walled tanks, or external liners (e.g., in a pit or excavation). Such methods shall meet the following requirements:

(a) Secondary containment systems shall be designed, constructed and installed to:

(i) Contain regulated substances released from the tank system until they are detected and removed;

(ii) Prevent precipitation and ground water from entering the external liner and prevent the release of regulated

substances to the environment at any time during the operational life of the UST system; and

(iii) Be checked for evidence of a release at least every thirty days.

Note: The provisions of 40 CFR 265.193, Containment and Detection of Releases, may be used to comply with these requirements.

(b) Double-walled tanks shall be designed, constructed, and installed to:

(i) Contain a release from any portion of the inner tank within the outer wall; and

(ii) Detect the failure of the inner wall.

(c) External liners (including vaults) shall be designed, constructed, and installed to:

(i) Contain one hundred ten percent of the capacity of the largest tank within its boundary;

(ii) Prevent the interference of precipitation or groundwater intrusion with the ability to contain or detect a release of regulated substances; and

(iii) Surround the tank completely (i.e., it is capable of preventing lateral as well as vertical migration of regulated substances).

(d) Underground piping shall be equipped with secondary containment that satisfies the requirements of subsection (2)(a) of this section (e.g., trench liners, jacketing double-walled pipe). In addition, underground piping that conveys regulated substances under pressure shall be equipped with an automatic line leak detector in accordance with WAC 173-360-350 (3)(a).

(e) Other methods of release detection may be used if owners and operators:

(i) Demonstrate to the department or delegated agency that an alternate method can detect a release of the stored substance as effectively as any of the methods allowed in WAC 173-360-345 (6)(b) through (j) can detect a release of petroleum;

(ii) Provide information to the department or delegated agency on effective corrective action technologies, health risks, and chemical and physical properties of the stored substance, and the characteristics of the UST site; and

(iii) Obtain approval from the department or delegated agency to use the alternate release detection method before the installation and operation of the new UST system.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-340, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-340, filed 11/28/90, effective 12/29/90.]

WAC 173-360-345 Methods of release detection for tanks. (1) Any method of release detection for tanks shall meet the performance requirements of this section. In addition, methods used after December 22, 1990, except for methods permanently installed prior to that date, shall be capable of detecting the leak rate or quantity specified for that method in subsection (6)(b), (c), (d), and (e) of this section with a probability of detection of 0.95 and a probability of false alarm of 0.05. (That is, under test conditions, a method will correctly detect at least ninety-five of one hundred actual releases, and will falsely indicate a release no more than five times in one hundred tests of nonleaking systems.)

Note: The establishment of leak indication thresholds is a means of setting a standard for the equipment or method used. It is not in any way meant to imply that actual leak rates less than these limits are allowable. No release is acceptable, and any indication that a release may have occurred should be investigated in accordance with WAC 173-360-360. Manufacturers and certified UST supervisors installing or utilizing leak detection equipment and/or methods must follow EPA's standard test procedures for evaluating leak detection methods to demonstrate compliance with the requirements of subsection (1) of this section.

(2) UST systems that meet the new tank or upgraded tank performance standards in WAC 173-360-305 or 173-360-310, and the inventory control requirements in subsection (6) (a) or (b) of this section, may use tank tightness testing (conducted in accordance with subsection (6)(d) of this section) at least every five years until December 22, 1998, or until ten years after the tank is installed or upgraded under WAC 173-360-310(2), whichever is later.

(3) UST systems that do not meet the new tank or upgraded tank performance standards in WAC 173-360-305 or 173-360-310 may use inventory controls (conducted in accordance with subsection (6) (a) or (b) of this section) and annual tank tightness testing (conducted in accordance with subsection (6)(d) of this section) until December 22, 1998, when the tank shall be upgraded under WAC 173-360-310 or permanently closed under WAC 173-360-385.

(4) Tanks with capacity of one thousand gallons or less may use weekly tank gauging conducted in accordance with subsection (6)(b) of this section.

(5) Tanks that store fuel solely for use by emergency power generators may use the following methods of release detection:

(a) Emergency power generator tanks with nominal capacity of one thousand gallons or less may use monthly tank gauging conducted in accordance with subsection (6)(c) of this section.

(b) Emergency power generator tanks with nominal capacity of one thousand one to two thousand gallons may use monthly tank gauging conducted in accordance with subsection (6)(c) of this section, in conjunction with annual tank tightness testing conducted in accordance with subsection (6)(d) of this section.

(c) Except as provided in subsection (2) of this section, emergency power generator tanks with nominal capacity greater than two thousand gallons may use weekly tank gauging conducted in accordance with subsection (6)(b) of this section, in conjunction with annual tank tightness testing conducted in accordance with subsection (6)(d) of this section.

(6) Each method of release detection for tanks used to meet the requirements of WAC 173-360-335 shall be conducted in accordance with the following:

(a) Daily inventory control. Daily inventory control (or another test of equivalent performance) shall be conducted in a manner capable of detecting a release of at least 1.0 percent of flow-through plus 130 gallons on a monthly basis in the following manner:

(i) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day;

(ii) The equipment used is capable of measuring the level of regulated substance in the tank over the full range of the tank's height to the nearest one-eighth of an inch;

(iii) The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery;

(iv) Deliveries are made through a drop tube that extends to within one foot of the tank bottom;

(v) Dispensing of regulated substances is metered and recorded within the local standards for meter calibration or an accuracy of at least six cubic inches for every five gallons of regulated substances which is withdrawn; and

(vi) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch at least once a month.

Note: Practices described in the American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," may be used, where applicable, as guidance in meeting the requirements of this paragraph.

(b) Weekly tank gauging. Only tanks of one thousand gallons or less nominal capacity may use weekly tank gauging as the sole method of release detection. Tanks of one thousand one to two thousand gallons may use the method in place of daily inventory control in (a) of this subsection, in conjunction with tank tightness testing, as specified in (d) of this subsection. Tanks of greater than two thousand gallons nominal capacity may use this method to meet the requirements of WAC 173-360-330 through 173-360-355 only if such tanks store fuel solely for use by emergency power generators. Weekly tank gauging shall meet the following requirements:

(i) Tank liquid level measurements are taken weekly at the beginning and ending of a period of at least thirty-six hours during which no liquid is added to or removed from the tank;

(ii) Level measurements are based on an average of two consecutive stick readings at both the beginning and ending of the period (that is, four measurements shall be taken, two consecutive measurements at the beginning and two consecutive measurements at the end of the period during which no liquid has been added or removed from the tank);

(iii) The equipment used is capable of measuring the level of regulated substance in the tank over the full range of the tank's height to the nearest one-eighth of an inch;

(iv) If the variation between beginning and ending measurements exceeds the weekly or monthly standards in the following table, a leak may be occurring and the requirements of WAC 173-360-360 through 173-360-375 shall be followed:

Nominal Tank Capacity	Weekly Standard (one test)	Monthly Standard
550 gallons or less	10 gallons	5 gallons
551-1,000 gallons	13 gallons	7 gallons
1,001-2,000 gallons	26 gallons	13 gallons
2,001 gallons or more*	.75% of capacity	.5% of capacity

(*Emergency Power Generator Tanks only.)

(c) Monthly tank gauging. Only tanks that store fuel solely for use by emergency power generators with a nominal capacity of two thousand gallons or less may use monthly tank gauging as a method of release detection. Such tanks with nominal capacity of one thousand one to two thousand gallons may use manual tank gauging in conjunction with tank tightness testing conducted in accordance with this section. Monthly tank gauging shall meet the following requirements:

(i) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded whenever inputs or withdrawals occur;

(ii) Tank liquid level measurements reconciled with inventory volume measurements are taken monthly at the beginning and ending of a period of at least twenty-one days, except when extreme snowfall or other travel obstructions occurring in remote locations and preventing access are specifically documented by the owner and operator;

(iii) Level measurements are based on an average of two consecutive readings at both the beginning and ending of the period (that is, four measurements shall be taken, two consecutive measurements at the beginning and two consecutive measurements at the end of the period);

(iv) The equipment used is capable of measuring the level of regulated substance in the tank over the full range of the tank's height to the nearest one-eighth of an inch or a corresponding amount of gallons;

(v) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch at least once a month;

(vi) If the variation between beginning and ending measurements exceeds the monthly standards in the following table, a leak may be occurring and the requirements of WAC 173-360-360 through 173-360-375 shall be followed:

Nominal Tank Capacity	Monthly Standard
550 gallons or less	5 gallons
551-1,000 gallons	7 gallons
1,001-2000 gallons	13 gallons

(d) Tank tightness testing. Tank tightness testing (or another test of equivalent performance) shall be capable of detecting at least a 0.1 gallon per hour leak rate from any portion of the tank up to the ninety-five percent full level or up to the product level limited by an overfill prevention device while accounting for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table. Tank tightness testing shall be conducted and the results reported in accordance with the instructions for that method.

(e) Automatic tank gauging. Equipment for automatic tank gauging that tests for the loss of regulated substance and conducts inventory control shall meet the following requirements:

(i) The automatic product level monitor test can detect at least a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance;

(ii) Daily inventory control (or another test of equivalent performance) is conducted in accordance with the requirements of (a) of this subsection; and

(iii) Automatic tank gauging equipment must be operated in the test mode at least once per year, and the results kept on file.

(f) Vapor monitoring. Testing or monitoring for vapors within the soil gas of the excavation zone shall meet the following requirements:

(i) The materials used as backfill are sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation zone;

(ii) The stored regulated substance, or a tracer compound placed in the tank system, is sufficiently volatile (e.g., gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank;

(iii) The measurement of vapors by the monitoring device is not rendered inoperative by the ground water, rainfall, or soil moisture or other known interferences so that a release could go undetected for more than thirty days;

(iv) The level of background contamination in the excavation zone will not interfere with the method used to detect releases from the tank;

(v) The vapor monitors are designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the tank system, a component or components of that substance, or a tracer compound placed in the tank system;

(vi) In the UST excavation zone, the site is evaluated for its appropriateness for installation of vapor monitors to ensure compliance with the requirements of this subsection and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the tank that routinely contains a regulated substance; and

(vii) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

Note: Monitoring wells must also comply with the minimum standards for construction, maintenance, and abandonment of resource protection wells specified in chapter 173-160 WAC. UST system owners and operators are encouraged to retain the services of a qualified professional who is experienced in determining the design and placement of vapor monitoring wells surrounding an UST system.

(g) Ground water monitoring. Testing or monitoring for liquids on or in the ground water shall meet the following requirements:

(i) The regulated substance stored is immiscible in water and has a specific gravity of less than one;

(ii) Ground water is never more than twenty feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec (e.g., the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials);

(iii) The slotted portion of the monitoring well casing shall be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low ground-water conditions;

(iv) Monitoring wells shall be sealed from the ground surface to the top of the filter pack;

(v) Monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible;

(vi) The continuous monitoring devices or manual methods used can detect the presence of at least one-eighth of an inch of free product on top of the ground water in the monitoring wells;

(vii) Within and immediately below the UST system excavation zone, the site is evaluated for its appropriateness for installation of ground water monitors to ensure compliance with the requirements in (g)(i) through (v) of this subsection and to establish the number and positioning of monitoring wells or devices that will detect releases from any portion of the tank that routinely contains a regulated substance; and

(viii) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

Note: Monitoring wells must also comply with the minimum standards for construction, maintenance, and abandonment of wells specified in chapter 173-160 WAC. UST system owners and operators are encouraged to retain the services of a qualified professional who is experienced in determining the design and placement of ground water monitoring wells surrounding an UST system.

(h) Interstitial monitoring. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the tank that routinely contains a regulated substance and also meets one of the following requirements:

(i) For double-walled UST systems, the sampling or testing method can detect a release through the inner wall in any portion of the tank that routinely contains a regulated substance;

Note: The provisions outlined in the Steel Tank Institute's "Standard for Dual Wall Underground Storage Tanks" may be used as guidance for aspects of the design and construction of underground steel double-walled tanks.

(ii) For UST systems with a secondary barrier within the excavation zone, the sampling or testing method used can detect a release between the UST system and the secondary barrier;

(A) The secondary barrier around or beneath the UST system consists of artificially constructed material that is sufficiently thick and impermeable (at least 10^{-6} cm/sec for the regulated substance stored) to direct a release to the monitoring point and permit its detection;

(B) The barrier is compatible with the regulated substance stored so that a release from the UST system will not cause a deterioration of the barrier allowing a release to pass through undetected;

(C) For cathodically protected tanks, the secondary barrier shall be installed so that it does not interfere with the proper operation of the cathodic protection system;

(D) The ground water, soil moisture, or rainfall will not render the testing or sampling method used inoperative so that a release could go undetected for more than thirty days;

(E) The site is evaluated for its appropriateness for installation of interstitial monitors to ensure that the secondary barrier is always above the ground water and not in a twenty-five-year flood plain, unless the barrier and monitoring designs are for use under such conditions; and

(F) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(iii) For tanks with an internally fitted liner, an automated device can detect a release between the inner wall of the tank and the liner, and the liner is compatible with the substance stored.

(i) Statistical inventory reconciliation. Statistical inventory reconciliation (SIR) shall meet the following requirements:

(i) Statistical inventory reconciliation must detect at least a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance with a

probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05; and

(ii) Daily inventory control must be performed in accordance with the requirements of (a) of this subsection; and

(iii) Owners and operators must submit daily inventory records from at least the previous thirty days on a monthly basis to a SIR vendor whose statistical analysis method has been demonstrated to meet the performance standard of (i) of this subsection; and

(iv) The SIR vendor must perform an independent SIR analysis on the daily inventory records submitted and report the results to the owner or operator within fifteen days of receiving them; and

(v) If the results of a SIR analysis show a 0.2 gallon per hour or greater leak rate in any single month, from any portion of the tank that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05, it shall be determined to be a "fail." If an owner or operator receives a "fail" for two consecutive months, the owner or operator shall have a tank tightness test conducted in accordance with (d) of this subsection within fifteen days of receiving the second "fail" from the SIR vendor.

(j) Other methods. Any other type of release detection method, or combination of methods, can be used if:

(i) It can detect a 0.2 gallon per hour leak rate or a release of one hundred fifty gallons within a month with a probability of detection of 0.95 and a probability of false alarm of 0.05; or

(ii) The department or delegated agency may approve another method if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in (d) through (i) of this subsection. In comparing methods, the department or delegated agency shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, the owner and operator shall comply with any conditions imposed by the department or delegated agency on its use to ensure the protection of human health and the environment.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-345, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-345, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-345, filed 11/28/90, effective 12/29/90.]

WAC 173-360-350 Methods of release detection for piping. (1) Any method of release detection for piping shall meet the performance requirements of this section, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer. In addition, release detection methods, except for those methods permanently installed prior to December 22, 1990, shall be capable of detecting the leak rate or quantity specified for that method in subsection (3)(a) and (b) of this section with a probability of detection of 0.95 and a probability of false alarm of 0.05. (That is, under test conditions, a method will correctly detect at least ninety-five of one hundred actual releases, and will falsely indicate a release no more than five times in one hundred tests of nonleaking systems.)

Note: The establishment of leak indication thresholds is a means of setting a standard for the equipment or method used. It is not in any way meant to imply that actual leak rates less than these limits are allowable. No release is acceptable, and any indication that a release may have occurred should be investigated in accordance with WAC 173-360-360.

(2) Underground piping that routinely contains regulated substances shall be monitored for releases in a manner that meets one of the following requirements:

(a) Pressurized piping. Underground piping that conveys regulated substances under pressure shall:

(i) Be equipped with an automatic line leak detector conducted in accordance with subsection (3)(a) of this section; and

(ii) Have an annual line tightness test conducted by a certified UST supervisor in accordance with subsection (3)(b) of this section or have monthly monitoring conducted in accordance with subsection (3)(c) of this section.

(b) Suction piping. Underground piping that conveys regulated substances under suction shall either have a line tightness test conducted at least every three years beginning when release detection is required and in accordance with subsection (3)(b) of this section, or use a monthly monitoring method conducted in accordance with subsection (3)(c) of this section. No release detection is required for suction piping that is designed and constructed to meet the following standards:

(i) The below-grade piping operates at less than atmospheric pressure;

(ii) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;

(iii) Only one check valve is included in each suction line;

(iv) The check valve is located directly below and as close as practical to the suction pump; and

(v) A method is provided that allows compliance with subsection (2)(b)(ii) through (iv) of this section to be readily determined.

(3) Each method of release detection for piping used to meet the requirements of WAC 173-360-335 shall be conducted in accordance with the following:

(a) Automatic line leak detectors. Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of three gallons per hour at ten pounds per square inch line pressure within one hour. An annual test of the operation of the leak detector shall be conducted in accordance with the manufacturer's requirements.

(b) Line tightness testing. A periodic test of piping may be conducted only if it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure, or if it can detect a leak rate equal to multiplying 0.1 gallon per hour by the square root of the value obtained by dividing the line pressure during testing by 1.5 times the operating pressure. Line tightness testing shall be conducted and results interpreted and reported in accordance with the department's guidance document for tightness testing, or as otherwise directed by the department or delegated agency.

(c) Applicable tank methods. Any of the methods in WAC 173-360-345 (6)(f) through (j) may be used if they are

designed to detect a release from any portion of the underground piping that routinely contains regulated substances.

(4) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-350, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-350, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-350, filed 11/28/90, effective 12/29/90.]

WAC 173-360-370 Release investigation and confirmation steps. Unless corrective action is initiated in accordance with WAC 173-360-399, owners and operators shall immediately investigate and confirm all suspected releases of regulated substances requiring reporting under WAC 173-360-360 within seven days of discovery, or another reasonable time period specified by the department or delegated agency, using either the following steps or another procedure approved by the department or delegated agency:

(1) System test. Owners and operators shall have tests conducted (according to the requirements for tightness testing in WAC 173-360-345 (6)(d) and 173-360-350 (3)(b)) that determine whether a leak exists in any portions of the UST system that routinely contains a regulated substance, including the tank and the attached delivery piping, and in any connected tanks and piping that may or may not be in use. All such portions shall be tested either separately or together or in combinations thereof.

(a) Owners and operators shall have their system repaired, replaced, upgraded or closed by a certified UST supervisor and shall begin corrective action in accordance with WAC 173-360-399 if the test results for the system, tank, or delivery piping indicate that a leak exists.

(b) Further investigation is not required if the test results for the system, tank, and delivery piping do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a release.

(c) Owners and operators shall conduct a site check in accordance with subsection (2) of this section if the test results for the system, tank, and delivery piping do not indicate that a leak exists but environmental contamination is the basis for suspecting a release.

(2) Site check. Owners and operators shall have a certified UST supervisor, as specified in WAC 173-360-610, sample for the presence of a release. Such samples shall be taken, analyzed, and results reported to the department or delegated agency in accordance with the department's guidance document for site checks and site assessments, or as otherwise directed by the department or delegated agency, where contamination is most likely to be present at the UST site.

(a) If the site check results indicate that a release has occurred, owners and operators shall report to the department or delegated agency in accordance with WAC 173-360-372 and begin corrective action in accordance with WAC 173-360-399.

(b) If the site check results indicate that a release has occurred, further investigation is not required under this chapter, but the release must be characterized and remediated in accordance with chapter 173-340 WAC.

(3) Certified UST supervisors who perform any of the tank services described in this section, shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-370, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-370, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-370, filed 11/28/90, effective 12/29/90.]

WAC 173-360-380 Temporary closure of UST systems. (1) When an UST system is temporarily closed, owners and operators shall continue operation and maintenance of corrosion protection in accordance with WAC 173-360-320, and any release detection in accordance with WAC 173-360-330 through 173-360-355. WAC 173-360-360 through 173-360-375 and 173-360-399 shall be complied with if a release is suspected or confirmed. However, release detection is not required as long as the UST system is empty. The UST system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the system.

(2) When an UST system is temporarily closed for three months or more, owners and operators shall also comply with the following requirements:

(a) Leave vent lines open and functioning; and

(b) Cap and secure all other lines, pumps, entryways, and ancillary equipment.

(3) Any UST system temporarily closed for three months or more shall be tightness tested by a certified UST supervisor in accordance with WAC 173-360-345 (6)(d) and 173-360-350 (3)(b) prior to being put back into service unless the system is subject to and in compliance with the release detection requirements of WAC 173-360-330.

(4) When an UST system is temporarily closed for more than twelve months, owners and operators shall have a certified UST supervisor permanently close the UST system if it does not either meet the performance standards in WAC 173-360-305 for new UST systems or the upgrading requirements in WAC 173-360-310 (2) and (3). Such UST systems shall be permanently closed in accordance with WAC 173-360-385 through 173-360-398 at the end of the twelve-month period unless the department or delegated agency provides an extension before expiration of the twelve-month temporary closure period. Owners and operators shall have a site assessment completed in accordance with WAC 173-360-390 before such an extension is applied for.

(5) Any active permits for those systems being temporarily closed shall be returned to the department within thirty days of completion of the temporary closure activities.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-380, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-380, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-380, filed 11/28/90, effective 12/29/90.]

WAC 173-360-385 Permanent closure and change-in-service. Permanent closure shall be completed by a certified UST supervisor.

(1) At least thirty days before beginning either permanent closure or a change-in-service under subsections (2) and (3) of this section, or within another reasonable time period determined by the department or delegated agency, owners and operators shall notify the department or delegated agency in writing of their intent to permanently close or make the change-in-service, unless such action is in response to corrective action. The site assessment required under WAC 173-360-390 shall be performed after notifying the department or delegated agency but before completion of the permanent closure or a change-in-service.

(2) Permanent closure shall be completed by a certified UST supervisor within sixty days after expiration of the thirty-day notice, unless a written request for an extension, explaining the reason for the request, is approved by the department or delegated agency. Any UST system not permanently closed by a compliance date that the UST system is subject to, shall be in compliance with the requirement associated with the compliance date, including the payment of fees. Any UST system not in compliance with any such requirement will be subject to the penalties described in WAC 173-360-170.

(3) To permanently close an UST system, the certified UST supervisor shall empty and clean the tank by removing all liquids and accumulated sludges.

Note: Any sludges removed must also be designated and disposed of in accordance with chapter 173-303 WAC.

(4) All tanks taken out of service permanently shall also be either removed from the ground or filled with an inert solid material. All piping shall either be capped (except any vent lines) or removed from the ground.

(5) Continued use of an UST system to store a nonregulated substance is considered a change-in-service. Before a change-in- service, owners and operators shall have a certified UST supervisor empty and clean the tank by removing all liquid and accumulated sludge, and shall have a site assessment conducted in accordance with WAC 173-360-390.

Note: The following cleaning and closure procedures may be used to comply with this section:

(A) American Petroleum Institute Recommended Practice 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks";

(B) American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks";

(C) American Petroleum Institute Recommended Practice 1631, "Interior Lining of Underground Storage Tanks," may be used as guidance for compliance with this section; and

(D) The National Institute for Occupational Safety and Health "Criteria for a Recommended Standard...Working in Confined Space" may be used as guidance for conducting safe closure procedures at some hazardous substance tanks.

(6) Owners and operators are responsible for submitting checklists for any of the tank services described in this section. Any active tank permits for the systems being closed shall be returned to the department within thirty days of closure activities.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-385, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-385, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-385, filed 11/28/90, effective 12/29/90.]

WAC 173-360-600 Purpose of Part VI. After the effective date of these regulations, individuals who perform tank services must be certified by the International Fire Code Institute, or other nationally recognized association that the department has determined provides an examination and credentials whereby individuals can demonstrate their knowledge of various regulatory codes, standards and practices pertaining to underground storage tanks, or have passed another qualifying exam approved by the department. Washington registered professional engineers who are competent, by means of examination, experience, or education, to perform site assessments, are not required to be certified for site assessment work.

The purpose of WAC 173-360-600 through 173-360-630 is to set forth standards for certification and responsibilities for certified UST supervisors.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-600, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-600, filed 11/28/90, effective 12/29/90.]

WAC 173-360-610 Scope. WAC 173-360-610 through 173-360-630 establishes requirements for:

Certification of UST supervisors who perform services on underground storage tank systems;

These rules apply to any person who performs the installation, retrofitting, decommissioning, testing, site check, site assessment, of underground storage tanks regulated by chapter 90.76 RCW.

These requirements do not apply to persons performing the activities specified in subsection (2) of this section for tanks which are exempt from the UST rule, as provided in WAC 173-360-110 (1) and (2).

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-610, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-610, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-610, filed 11/28/90, effective 12/29/90.]

WAC 173-360-620 Types of certifications. The department requires certifications in the following areas:

(1) Tank installation and retrofitting;

(2) Tank decommissioning;

(3) Tightness testing;

(4) Cathodic protection installation and testing; and

(5) Site assessment associated with tank closure.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-620, filed 2/1/95, effective 3/4/95.]

WAC 173-360-630 Responsibilities of certified UST supervisors. (1) Any certified UST supervisor shall comply with WAC 173-360-600 through 173-360-630, and comply with all federal and state regulations and procedures when performing tank services.

(2)(a) A checklist must be completed for each regulated activity performed. The certified UST supervisor shall sign the checklist provided by the department within thirty days following the completion of an underground storage tank installation, retrofit, decommissioning, or test.

(b) An as-built site plan, showing the location of completed tank system installations or retrofitted tank system, including adjacent structures, if present shall be submitted for installations and retrofits. The as-built site plan shall be submitted on the appropriate form provided by the department, or shall be an 8 1/2 inch by 11 inch single page drawing.

(3) A certified UST supervisor shall report to the department and the tank owner or operator the existence of any confirmed release from an underground tank system that poses a threat to human health and the environment. This report shall be provided to the tank owner or operator immediately, and to the department within seventy-two hours of the discovery of the condition. If the owner or operator are not immediately available, the report should be made immediately to the department.

(4) A certified UST supervisor shall be present on site at all times tank service activities are being carried out at a tank installation, retrofit, testing, decommissioning project unless otherwise determined by the department. These tasks may include but may not be limited to:

(a) Preparing the excavation immediately prior to receiving backfill and placement of the tank into the excavation;

(b) Any movement of the tank vessel, including but not limited to transferring the vessel from the vehicle used to transport it to the project site;

(c) Setting the tank and its associated piping into the excavation, including placing any anchoring devices and strapping, if any, and backfilling to the level of the tank;

(d) Placing and connecting the piping system to the tank vessel;

(e) Installing cathodic protection systems;

(f) All pressure testing of the underground storage tank system, including associated piping, performed during the installation or retrofitting;

(g) Completing the backfill and filling of the installation;

(h) Evaluating preparation for and installing any tank lining system;

(i) Tank purging or inerting;

(j) Removal of the tank, removal of sludge from the tank, and cleaning of the tank;

(k) Removing flammable vapors from tanks;

(l) Excavating around tanks for removal;

(m) Field installation and operational testing of cathodic protection systems;

(n) Inspecting of existing tank and piping systems for corrosion;

(o) Tank or line tightness testing;

(p) Inspection of existing tanks for structural integrity;

(q) Installation of release detection equipment; and

(r) Conducting a site assessment at tank closure.

(5) If a certified UST supervisor obtains knowledge, in the course of performing regulated activities, that a regulated underground storage tank has not been registered with the department, or is otherwise out of compliance with the requirements of this chapter, the individual shall inform the tank owner or operator of the notification requirement and any other applicable requirements.

(6) Proof of supervisor certification shall be available for inspection at any project site.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-630, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-630, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-630, filed 11/28/90, effective 12/29/90.]

WAC 173-360-640 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-360-650 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-360-655 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-360-660 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-360-680 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-360-690 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-360-695 Repealed. See Disposition Table at beginning of this chapter.

Chapter 173-400 WAC
GENERAL REGULATIONS FOR AIR POLLUTION SOURCES

WAC

WAC 173-400-030 Definitions. Except as provided elsewhere in this chapter, the following definitions apply throughout the chapter:

(1) "Actual emissions" means the actual rate of emissions of a pollutant from an emission unit, as determined in accordance with (a) through (c) of this subsection.

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. Ecology or an authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) Ecology or an authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the emissions unit.

(c) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the emissions unit on that date.

(2) "Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairment, and how these factors correlate with (a) times of visitor use of the Federal Class I area, and (b) the frequency and timing of natural conditions that reduce visibility. This term does not include effects on integral vistas.

(3) "Air contaminant" means dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substance, or any combination thereof. "Air pollutant" means the same as "air contaminant."

(4) "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities, and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property. For the purposes of this chapter, air pollution shall not include air contaminants emitted in compliance with chapter 17.21 RCW, the Washington Pesticide Application Act, which regulates the application and control of the use of various pesticides.

(5) "Allowable emissions" means the emission rate of a stationary source calculated using the maximum rated capacity of the stationary source (unless the stationary source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(a) The applicable standards as set forth in 40 CFR Part 60 or 61;

(b) Any applicable state implementation plan emissions limitation including those with a future compliance date; or

(c) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

(6) "Ambient air" means the surrounding outside air.

(7) "Ambient air quality standard" means an established concentration, exposure time, and frequency of occurrence of air contaminant(s) in the ambient air which shall not be exceeded.

(8) "Authority" means any air pollution control agency whose jurisdictional boundaries are coextensive with the boundaries of one or more counties.

(9) "Best available control technology (BACT)" means an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of the "best available control technology" result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard under 40 CFR Part 60 and Part 61, as they exist on May 7, 1993, or their later enactments as adopted by reference by the director by rule. Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under the definition of BACT in the Federal Clean Air Act as it existed prior to enactment of the Clean Air Act Amendments of 1990.

(10) "Best available retrofit technology (BART)" means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

(11) "Bubble" means a set of emission limits which allows an increase in emissions from a given emissions unit(s) in exchange for a decrease in emissions from another emissions unit(s), pursuant to RCW 70.94.155 and WAC 173-400-120.

(12) "Capacity factor" means the ratio of the average load on equipment or a machine for the period of time considered, to the manufacturer's capacity rating of the machine or equipment.

(13) "Class I area" means any area designated pursuant to §§ 162 or 164 of the Federal Clean Air Act as a Class I area. The following areas are the Class I areas in Washington state:

Alpine Lakes Wilderness;
Glacier Peak Wilderness;
Goat Rocks Wilderness;
Mount Adams Wilderness;
Mount Rainier National Park;
North Cascades National Park;
Olympic National Park;
Pasayten Wilderness;
Spokane Indian Reservation.

(14) "Combustion and incineration sources" means units using combustion for waste disposal, steam production, chemical recovery or other process requirements; but excludes open burning.

(15) "Commenced construction" means that the owner or operator has all the necessary preconstruction approvals or permits and either has:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a

program of actual construction of the source to be completed within a reasonable time.

(16) "Concealment" means any action taken to reduce the observed or measured concentrations of a pollutant in a gaseous effluent while, in fact, not reducing the total amount of pollutant discharged.

(17) "Director" means director of the Washington state department of ecology or duly authorized representative.

(18) "Dispersion technique" means a method which attempts to affect the concentration of a pollutant in the ambient air other than by the use of pollution abatement equipment or integral process pollution controls.

(19) "Ecology" means the Washington state department of ecology.

(20) "Emission" means a release of air contaminants into the ambient air.

(21) "Emission reduction credit (ERC)" means a credit granted pursuant to WAC 173-400-131. This is a voluntary reduction in emissions.

(22) "Emission standard" and "emission limitation" means a requirement established under the FCAA or chapter 70.94 RCW which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment work practice, or operational standard promulgated under the FCAA or chapter 70.94 RCW.

(23) "Emissions unit" means any part of a stationary source or source which emits or would have the potential to emit any pollutant subject to regulation under the FCAA, chapter 70.94 or 70.98 RCW.

(24) "Excess emissions" means emissions of an air pollutant in excess of any applicable emission standard.

(25) "Excess stack height" means that portion of a stack which exceeds the greater of sixty-five meters or the calculated stack height described in WAC 173-400-200(2).

(26) "Existing stationary facility" means a stationary source of air pollutants which has the potential to emit two hundred fifty tons per year or more of any air pollutant. In determining potential to emit, fugitive emissions, to the extent quantifiable, must be counted. For purposes of determining whether a stationary source is an existing stationary facility the term "building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same major group (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual, 1972,* as amended by the 1977 Supplement.

(27) "Federal Clean Air Act (FCAA)" means the Federal Clean Air Act, also known as Public Law 88-206, 77 Stat. 392, December 17, 1963, 42 U.S.C. 7401 et seq., as last amended by the Clean Air Act Amendments of 1990, P.L. 101-549, November 15, 1990.

(28) "Federal land manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(29) "Fossil fuel-fired steam generator" means a device, furnace, or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

(30) "Fugitive dust" means a particulate emission made airborne by forces of wind, man's activity, or both. Unpaved roads, construction sites, and tilled land are examples of areas that originate fugitive dust. Fugitive dust is a type of fugitive emission.

(31) "Fugitive emissions" means emissions which do not pass and which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(32) "General process unit" means an emissions unit using a procedure or a combination of procedures for the purpose of causing a change in material by either chemical or physical means, excluding combustion.

(33) "Good engineering practice (GEP)" refers to a calculated stack height based on the equation specified in WAC 173-400-200 (2)(a)(ii).

(34) "Incinerator" means a furnace used primarily for the thermal destruction of waste.

(35) "In operation" means engaged in activity related to the primary design function of the source.

(36) "Integral vista" means a view perceived from within a mandatory Class I federal area of a specific landmark or panorama located outside the boundary of the mandatory Class I federal area.

(37) "Lowest achievable emission rate (LAER)" means for any source that rate of emissions which reflects the more stringent of:

(a) The most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed new or modified source demonstrates that such limitations are not achievable; or

(b) The most stringent emission limitation which is achieved in practice by such class or category of source.

In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source performance standards.

(38) "Mandatory Class I federal area" means any area defined in Section 162(a) of the FCAA. The mandatory Class I federal areas in Washington state are as follows:

Alpine Lakes Wilderness;
Glacier Peak Wilderness;
Goat Rocks Wilderness;
Mount Adams Wilderness;
Mount Rainier National Park;
North Cascades National Park;
Olympic National Park;
Pasayten Wilderness.

(39) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the FCAA. Any net emissions increase that is considered significant for volatile organic compounds or nitrogen oxides shall be considered significant for ozone. A physical change or change in the method of operation shall not include:

(a) Routine maintenance, repair, and replacement;

(b) Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Supply Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(c) Use of an alternative fuel by reason of an order or rule under section 125 of the FCAA, 42 U.S.C. 7425;

(d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(e) Use of an alternative fuel or raw material by a stationary source which:

(i) The stationary source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 12, 1976, in a prevention of significant deterioration permit or notice of construction approval; or

(ii) The stationary source is approved to use under any federally-enforceable notice of construction approval or a PSD permit issued by the environmental protection agency;

(f) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976, in a prevention of significant deterioration permit or a notice of construction approval;

(g) Any change in ownership at a stationary source.

(40) "Major stationary source" means:

(a) Any stationary source which:

(i) Emits or has the potential to emit one hundred tons per year or more of any air contaminant regulated by the state or Federal Clean Air Acts; or

(ii) Is located in a "marginal" or "moderate" ozone nonattainment area and which emits or has the potential to emit one hundred tons per year or more of volatile organic compounds or oxides of nitrogen.

(b) Any stationary source (or group of stationary sources) which:

(i) Is located in a "serious" carbon monoxide nonattainment area where stationary sources contribute significantly to carbon monoxide levels and which emits or has the potential to emit fifty tons per year or more of carbon monoxide; or

(ii) Is located in a "serious" particulate matter (PM_{10}) nonattainment area and which emits or has the potential to emit seventy tons per year or more of PM_{10} emissions.

(c) Any physical change that would occur at a stationary source not qualifying under (a) or (b) of this subsection as a major stationary source, if the change would constitute a major stationary source by itself;

(d) A major stationary source that is major for VOCs or NOx shall be considered major for ozone;

(e) The fugitive emissions of a stationary source shall not be included in determining whether it is a major stationary source, unless the stationary source belongs to one of the following categories of stationary sources or the source is a major stationary source due to (b) of this subsection:

(i) Coal cleaning plants (with thermal dryers);

(ii) Kraft pulp mills;

(iii) Portland cements plants;

(iv) Primary zinc smelters;

(v) Iron and steel mills;

(vi) Primary aluminum ore reduction plants;

(vii) Primary copper smelters;

(viii) Municipal incinerators capable of charging more than two hundred fifty tons of refuse per day;

(ix) Hydrofluoric, sulfuric, or nitric acid plants;

(x) Petroleum refineries;

(xi) Lime plants;

(xii) Phosphate rock processing plants;

(xiii) Coke oven batteries;

(xiv) Sulfur recovery plants;

(xv) Carbon black plants (furnace process);

(xvi) Primary lead smelters;

(xvii) Fuel conversion plants;

(xviii) Sintering plants;

(xix) Secondary metal production plants;

(xx) Chemical process plants;

(xxi) Fossil-fuel boilers (or combination thereof) totaling more than two hundred fifty million British thermal units per hour heat input;

(xxii) Petroleum storage and transfer units with a total storage capacity exceeding three hundred thousand barrels;

(xxiii) Taconite ore processing plants;

(xxiv) Glass fiber processing plants;

(xxv) Charcoal production plants;

(xxvi) Fossil fuel-fired steam electric plants of more than two hundred fifty million British thermal units per hour heat input; and

(xxvii) Any other stationary source category which, as of August 7, 1980, was being regulated under sections 111 or 112 of the Federal Clean Air Act.

(f) For purposes of determining whether a stationary source is a major stationary source, the term "building, structure, facility, or installation" means all the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual, 1972,* as amended by the 1977 Supplement.

(41) "Masking" means the mixing of a chemically nonreactive control agent with a malodorous gaseous effluent to change the perceived odor.

(42) "Materials handling" means the handling, transporting, loading, unloading, storage, and transfer of materials with no significant chemical or physical alteration.

(43) "Modification" means any physical change in, or change in the method of operation of, a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emissions of any air contaminant not previously emitted. The term modification shall be construed consistent with the definitions of modification in Section 7411, Title 42, United States Code, and with rules implementing that section.

(44) "National Emission Standards for Hazardous Air Pollutants (NESHAPS)" means the federal regulations set forth in 40 CFR Part 61.

(45) "Natural conditions" means naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast, or coloration.

(46) "Net emissions increase" means:

(a) The amount by which the sum of the following exceeds zero:

(i) Any increase in actual emissions from a particular change or change in method of operation at a source; and

(ii) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date ten years before construction on the particular change commences and the date that the increase from the particular change occurs.

(c) An increase or decrease in actual emissions is creditable only if:

(i) It occurred no more than one year prior to the date of submittal of a complete notice of construction application for the particular change, or it has been documented by an emission reduction credit, in which case the credit shall expire ten years after the date of original issue of the ERC. Any emissions increases occurring between the date of issuance of the ERC and the date when a particular change becomes operational shall be counted against the ERC.

(ii) Ecology or the authority has not relied on it in issuing any permit or order of approval for the source under regulations approved pursuant to 40 CFR 51 Subpart I or the EPA has not relied on it in issuing a PSD permit pursuant to 40 CFR 52.21, which order or permit is in effect when the increase in actual emissions from the particular change occurs.

(d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(e) A decrease in actual emissions is creditable only to the extent that:

(i) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(ii) It is federally enforceable at and after the time that actual construction on the particular change begins;

(iii) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(iv) Ecology or the authority has not relied on it in issuing any permit or order of approval under regulations approved pursuant to 40 CFR 51 Subpart I, the EPA has not relied on it in issuing a PSD permit pursuant to 40 CFR 52.21, or ecology or the authority has not relied on it in demonstrating attainment or reasonable further progress.

(f) An increase that results from a physical change at a source occurs when the emission unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty days.

(47) "New source" means:

(a) The construction or modification of a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted; and

(b) Any other project that constitutes a new source under the Federal Clean Air Act.

(48) "New source performance standards (NSPS)" means the federal regulations set forth in 40 CFR Part 60.

(49) "Nonattainment area" means a clearly delineated geographic area which has been designated by EPA promulgation as exceeding a national ambient air quality standard or standards for one or more of the criteria pollutants.

(50) "Notice of construction application" means a written application to permit construction of a new source, modification of an existing stationary source or replacement or substantial alteration of control technology at an existing stationary source.

(51) "Opacity" means the degree to which an object seen through a plume is obscured, stated as a percentage.

(52) "Open burning" means the combustion of material in an open fire or in an outdoor container, without providing for the control of combustion or the control of the emissions from the combustion. Wood waste disposal in wigwam burners is not considered open burning.

(53) "Order" means any order issued by ecology or a local air authority pursuant to chapter 70.94 RCW, including, but not limited to RCW 70.94.332, 70.94.152, 70.94.153, and 70.94.141(3), and includes, where used in the generic sense, the terms order, corrective action order, order of approval, and regulatory order.

(54) "Order of approval" or "approval order" means a regulatory order issued by ecology or the authority to approve the notice of construction application for a proposed new source or modification, or the replacement or substantial alteration of control technology at an existing stationary source.

(55) "Particulate matter" or "particulates" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

(56) "Particulate matter emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method specified in 40 CFR Part 60 or by a test method specified in the Washington state implementation plan.

(57) "Parts per million (ppm)" means parts of a contaminant per million parts of gas, by volume, exclusive of water or particulates.

(58) "Person" means an individual, firm, public or private corporation, association, partnership, political subdivision, municipality, or government agency.

(59) "PM-10" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 CFR Part 50 Appendix J and designated in accordance with 40 CFR Part 53 or by an equivalent method designated in accordance with 40 CFR Part 53.

(60) "PM-10 emissions" means finely divided solid or liquid material, including condensible particulate matter, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternate method, specified in Appendix M of 40 CFR Part 51 or by a test method specified in the Washington state implementation plan.

(61) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(62) "Prevention of significant deterioration (PSD)" means the program set forth in WAC 173-400-141.

(63) "Projected width" means that dimension of a structure determined from the frontal area of the structure, projected onto a plane perpendicular to a line between the center of the stack and the center of the building.

(64) "Reasonably attributable" means attributable by visual observation or any other technique the state deems appropriate.

(65) "Reasonably available control technology (RACT)" means the lowest emission limit that a particular source or source category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. RACT is determined on a case-by-case basis for an individual source or source category taking into account the impact of the source upon air quality, the availability of additional controls, the emission reduction to be achieved by additional controls, the impact of additional controls on air quality, and the capital and operating costs of the additional controls. RACT requirements for any source or source category shall be adopted only after notice and opportunity for comment are afforded.

(66) "Regulatory order" means an order issued by ecology or an authority to an air contaminant source which applies to that source, any applicable provision of chapter 70.94 RCW, or the rules adopted thereunder, or, for sources regulated by a local air authority, the regulations of that authority.

(67) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emission equal to or greater than any one of the following rates:

Pollutant	Tons/Year
Carbon monoxide	100
Nitrogen oxides	40
Sulfur dioxide	40
Particulate matter (PM)	25
Fine particulate matter (PM_{10})	15
Volatile organic compounds (VOC)	40
Lead	0.6
Fluorides	3
Sulfuric acid mist	7
Hydrogen sulfide (H_2S)	10
Total reduced sulfur (including H_2S)	10
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans	0.0000035
Municipal waste combustor metals (measured as PM)	15
Municipal waste combustor acid gases (measured as SO_2 and hydrogen chloride)	40

(68) "Significant visibility impairment" means visibility impairment which interferes with the management, protection, preservation, or enjoyment of visitor visual experience of the Class I area. The determination must be made on a case-by-case basis, taking into account the geographic extent, intensity, duration, frequency, and time of the visibility impairment, and how these factors correlate with the time of visitor use of the Class I area and frequency and timing of natural conditions that reduce visibility.

(69) "Source" means all of the emissions unit(s) including quantifiable fugitive emissions, that are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control, whose activities are ancillary to the production of a single product or functionally related groups of products. Activities shall be considered ancillary to the production of a single product or functionally related group of products if they belong to the same major group (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual, 1972,* as amended by the 1977 Supplement.

(70) "Source category" means all sources of the same type or classification.

(71) "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct.

(72) "Stack height" means the height of an emission point measured from the ground-level elevation at the base of the stack.

(73) "Standard conditions" means a temperature of 20°C (68°F) and a pressure of 760 mm (29.92 inches) of mercury.

(74) "Stationary source" means any building, structure, facility, or installation which emits or may emit any contaminant. This term does not include emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216 of the FCAA.

(75) "Sulfuric acid plant" means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge.

(76) "Synthetic minor" means any source whose emissions have been limited below the source's potential to emit by means of a federally enforceable order, rule, or permit condition.

(77) "Total reduced sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide, and any other organic sulfides emitted and measured by EPA method 16 or an approved equivalent method and expressed as hydrogen sulfide.

(78) "Total suspended particulate" means particulate matter as measured by the method described in 40 CFR Part 50 Appendix B as in effect on July 1, 1988.

(79) "United States Environmental Protection Agency (USEPA)" shall be referred to as EPA.

(80) "Visibility impairment" means any perceptible degradation in visibility (visual range, contrast, coloration) not caused by natural conditions.

(81) "Visibility impairment of Class I areas" means visibility impairment within the area and visibility impairment of any formally designated integral vista associated with the area.

(82) "Volatile organic compound (VOC)" means:

(a) Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. This includes any organic compound other than the following, which have negligible photochemical activity: Methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,1-trichloro 2,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (CFC-22); trifluoromethane (FC-23); 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro 1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); and perfluorocarbon compounds which fall into these classes:

(i) Cyclic, branched, or linear completely fluorinated alkanes;

(ii) Cyclic, branched, or linear completely fluorinated ethers with no unsaturations; and

(iii) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(b) For the purpose of determining compliance with emission limits, VOC will be measured by the appropriate methods in 40 CFR Part 60 Appendix A. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOC if the amount of such compounds is accurately quantified, and such exclusion is approved by ecology or the authority.

(c) As a precondition to excluding these negligibly-reactive compounds as VOC or at any time thereafter, ecology or the authority may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of ecology or the authority, the amount of negligibly-reactive compounds in the source's emissions.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-030, filed 3/22/95, effective 4/22/95; 93-18-007 (Order 93-03), § 173-400-030, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-030, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-030, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-030, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-030, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-030, filed 5/8/79; Order DE 76-38, § 173-400-030, filed 12/21/76. Formerly WAC 18-04-030.]

WAC 173-400-099 Registration program. (1) Program purpose. The registration program is a program to develop and maintain a current and accurate record of air contaminant sources. Information collected through the registration program is used to evaluate the effectiveness of air pollution control strategies and to verify source compliance with applicable air pollution requirements.

(2) Program components. The components of the registration program consist of:

(a) Initial registration and annual or other periodic reports from stationary source owners providing information on location, size, height of contaminant outlets, processes employed, nature and quantity of the air contaminant emissions, and other information that is relevant to air pollution and available or reasonably capable of being assembled. For purposes of this chapter, information relevant to air pollution may include air pollution requirements established by rule, regulatory order, or ordinance pursuant to chapter 70.94 RCW.

(b) On-site inspections necessary to verify compliance with registration requirements.

(c) Data storage and retrieval systems necessary for support of the registration program.

(d) Emission inventory reports and emission reduction credits computed from information provided by source owners pursuant to registration requirements.

(e) Staff review, including engineering analysis for accuracy and currentness of information provided by source owners pursuant to registration program requirements.

(f) Clerical and other office support in direct furtherance of the registration program.

(g) Administrative support provided in directly carrying out the registration program.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-099, filed 3/22/95, effective 4/22/95.]

WAC 173-400-100 Source classifications. (1) Source classification list. In counties without an active local air pollution control authority, the owner or operator of each stationary source within the following source categories shall register the source with ecology:

(a) Agricultural chemical facilities engaging in the manufacturing of liquid or dry fertilizers or pesticides;

(b) Agricultural drying and dehydrating operations;

(c) Any category of stationary sources to which a federal standard of performance (NSPS) under 40 CFR Part 60, other than Subpart AAA (Standards of Performance for New Residential Wood Heaters) applies;

(d) Any source category subject to a National Emission Standard for Hazardous Air Pollutants (NESHAPS) under 40 CFR Part 61, other than Subpart M (National Emission Standard for Asbestos) or a Maximum Achievable Control Technology (MACT) standard established under Section 112 of the Federal Clean Air Act;

(e) Any source, stationary source or emission unit with a significant emission as defined by WAC 173-400-030(67);

(f) Asphalt and asphalt products production facilities;

(g) Brick and clay manufacturing plants, including tiles and ceramics;

(h) Casting facilities and foundries, ferrous and nonferrous;

(i) Cattle feedlots with operational facilities which have an inventory of one thousand or more cattle in operation

between June 1 and October 1, where vegetation forage growth is not sustained over the majority of the lot during the normal growing season;

(j) Chemical manufacturing plants;

(k) Composting operations, including commercial, industrial and municipal, but exempting residential composting activities;

(l) Concrete product manufacturers and ready mix and premix concrete plants;

(m) Crematoria or animal carcass incinerators;

(n) Dry cleaning plants;

(o) Materials handling and transfer facilities that generate fine particulate, which may include pneumatic conveying, cyclones, baghouses, and industrial housekeeping vacuuming systems that exhaust to the atmosphere;

(p) Flexible vinyl and urethane coating and printing operations;

(q) Grain, seed, animal feed, legume, and flour processing operations, and handling facilities;

(r) Hay cubers and pelletizers;

(s) Hazardous waste treatment and disposal facilities;

(t) Ink manufacturers;

(u) Insulation fiber manufacturers;

(v) Landfills, active and inactive, including covers, gas collections systems or flares;

(w) Metal plating and anodizing operations;

(x) Metallic and nonmetallic mineral processing plants, including rock crushing plants;

(y) Mills such as lumber, plywood, shake, shingle, woodchip, veneer operations, dry kilns, pulpwood insulating board, or any combination thereof;

(z) Mineralogical processing plants;

(aa) Other metallurgical processing plants;

(bb) Paper manufacturers;

(cc) Petroleum refineries;

(dd) Plastics and fiberglass product fabrication facilities;

(ee) Rendering plants;

(ff) Soil and groundwater remediation projects;

(gg) Surface coating manufacturers;

(hh) Surface coating operations including: Automotive, metal, cans, pressure sensitive tape, labels, coils, wood, plastic, rubber, glass, paper and other substrates;

(ii) Synthetic fiber production facilities;

(jj) Synthetic organic chemical manufacturing industries;

(kk) Tire recapping facilities;

(ll) Wastewater treatment plants;

(mm) Any source that has elected to opt-out of the operating permit program by limiting its potential-to-emit (synthetic minor) or is required to report periodically to demonstrate nonapplicability to EPA requirements under Sections 111 or 112 of FCAA.

(2) Equipment classification list. In counties without an active local air pollution control authority, the owner or operator of the following equipment shall register the source with ecology:

(a) Boilers, all solid and liquid fuel burning boilers with the exception of those utilized for residential heating;

(b) Boilers, all gas fired boilers above 10 million British thermal units per hour input;

(c) Chemical concentration evaporators;

(d) Degreasers of the cold or vapor type in which more than five percent of the solvent is comprised of halogens or such aromatic hydrocarbons as benzene, ethylbenzene, toluene or xylene;

(e) Ethylene oxide (ETO) sterilizers;

(f) Flares utilized to combust any gaseous material;

(g) Fuel burning equipment with a heat input of more than 1 million Btu per hour; except heating, air conditioning systems, or ventilating systems not designed to remove contaminants generated by or released from equipment;

(h) Incinerators designed for a capacity of one hundred pounds per hour or more;

(i) Ovens, burn-out and heat-treat;

(j) Stationary internal combustion engines and turbines rated at five hundred horsepower or more;

(k) Storage tanks for organic liquids associated with commercial or industrial facilities with capacities equal to or greater than 40,000 gallons;

(l) Vapor collection systems within commercial or industrial facilities;

(m) Waste oil burners above 0.5 mm Btu heat output;

(n) Woodwaste incinerators.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-100, filed 3/22/95, effective 4/22/95; 93-18-007 (Order 93-03), § 173-400-100, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-100, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-100, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-100, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-100, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-100, filed 5/8/79; Order DE 76-38, § 173-400-100, filed 12/21/76. Formerly WAC 18-04-100.]

WAC 173-400-101 Registration issuance. (1) General. Any person operating or responsible for the operation of an air contaminant source for which registration and reporting are required shall register the source emission unit with ecology or the authority. The owner or operator shall make reports containing information as may be required by ecology or the authority concerning location, size and height of contaminant outlets, processes employed, nature and quantity of the air contaminant emission and such other information as is relevant to air pollution and available or reasonably capable of being assembled.

(2) Registration form. Registration information shall be provided on forms supplied by ecology or the authority and shall be completed and returned within the time specified on the form. Emission units within the facility shall be listed separately unless ecology or the authority determines that certain emission units may be combined into process streams for purposes of registration and reporting.

(3) Signatory responsibility. The owner, operator, or their designated management representative shall sign the registration form for each source. The owner or operator of the source shall be responsible for notifying ecology or the authority of the existence of the source, and for the accuracy, completeness, and timely submittal of registration reporting information and any accompanying fee.

(4) Operational and maintenance plan. Owners or operators of registered sources within ecology's jurisdiction shall maintain an operation and maintenance plan for process and control equipment. The plan shall reflect good industrial practice and shall include a record of performance and periodic inspections of process and control equipment. In

most instances, a manufacturer's operations manual or an equipment operation schedule may be considered a sufficient operation and maintenance plan. The plan shall be reviewed and updated by the source owner or operator at least annually. A copy of the plan shall be made available to ecology upon request.

(5) Report of closure. A report of closure shall be filed with ecology or the authority within ninety days after operations producing emissions permanently cease at any applicable source under this section.

(6) Report of change of ownership. A new owner or operator shall report to ecology or the authority within ninety days of any change of ownership or change in operator.

(7) Operating permit program source exemption. Permit program sources, as defined in RCW 70.94.030(17), are not required to comply with the registration requirements of WAC 173-400-100 through 173-400-104.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-101, filed 3/22/95, effective 4/22/95; 94-10-042 (Order 93-39), § 173-400-101, filed 4/29/94, effective 5/30/94.]

WAC 173-400-102 Scope of registration and reporting requirements. (1) Administrative options. A source in a listed source category that is located in a county without an active local air authority will be addressed in one of several ways:

(a) The source will be required to register and report once each year. The criteria for identifying these sources are listed in subsection (2) of this section.

(b) The source will be required to register and report once every three years. The criteria for identifying these sources are listed in subsection (3) of this section.

(c) The source will be exempted from registration program requirements. The criteria for identifying these sources are listed in subsection (4) of this section.

(2) Sources requiring annual registration and inspections. An owner or operator of a source in a listed source category that meets the following criteria shall register and report once each year:

(a) The source emits one or more pollutants at rates greater than the emission rates listed in WAC 173-400-030(67);

(b) Annual registration and reporting is necessary to comply with federal reporting requirements and emission standards; or

(c) Annual registration and reporting is required in a reasonably available control technology determination for the source category.

(d) The director of ecology determines that the source poses a threat to human health and the environment.

(3) Sources requiring periodic registration and inspections. An owner or operator of a source in a listed source category that meets the following criteria shall register and report once every three years:

(a) The source emits one or more pollutants at rates greater than the emission rates listed in subsection (5) of this section and less than the emission rates listed in WAC 173-400-030(67); or

(b) The source emits measurable amounts of one or more Class A or Class B toxic air pollutants listed in WAC 173-460-150 and 173-460-160.

(4) Sources exempt from registration program requirements. Any source included in a listed source category that is located in a county without an active local air authority shall not be required to register if ecology determines the following:

(a) The source emits pollutants below emission rates specified in subsection (5) of this section; and

(b) The source or emission unit does not emit measurable amounts of Class A or Class B toxic air pollutants specified in WAC 173-460-150 and 173-460-160.

(5) Criteria for defining exempt sources. The following emission rates will be used to identify listed sources that are exempt from registration program requirements:

Pollutant	Tons/Year
Carbon Monoxide	5.0
Nitrogen oxides	2.0
Sulfur dioxide	2.0
Particulate Matter (PM)	1.25
Fine Particulate (PM10)	0.75
Volatile organic compounds (VOC)	2.0
Lead	0.005

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-102, filed 3/22/95, effective 4/22/95.]

WAC 173-400-103 Emission estimates. (1) Procedure for estimating emissions. In counties without an active local air pollution control authority, registration may include an estimate of actual emissions taking into account equipment, operating conditions, and air pollution control measures. Registration may also include a flowchart of plant processes, operational parameters, and specifications of air pollution control equipment. The emissions estimate shall be based upon actual test data or, in the absence of such data, upon procedures acceptable to ecology. Any emission data submitted to ecology shall be verifiable using currently accepted engineering criteria. The following procedures may be used to estimate emissions from individual sources or emissions units:

(a) Source-specific testing data;

(b) Mass balance calculations;

(c) A published, verifiable emission factor that is applicable to the source;

(d) Other engineering calculations; or

(e) Other procedures to estimate emissions that are acceptable to ecology.

(2) Owner or operator review. Ecology will provide the owner or operator of the source an opportunity to review any emission estimates prepared by ecology. An owner or operator may submit additional information and any justification for not using the methods listed above. This information will be evaluated by ecology to determine whether it is based on currently accepted engineering criteria. If none of the above methods are available or applicable to the source, an appropriate method will be established and approved by ecology on a case-by-case basis.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-103, filed 3/22/95, effective 4/22/95.]

WAC 173-400-104 Registration fees. (1) Registration fee determination. In counties without an active local

air pollution control authority, ecology shall establish registration fees based on workload using the process outlined below. The fees collected shall be sufficient to cover the direct and indirect costs of administering the registration program within ecology's jurisdiction.

(2) Budget preparation. Ecology shall conduct a workload analysis projecting resource requirements for administering the registration program. Workload estimates shall be prepared on a biennial basis and shall estimate the resources required to perform registration program activities listed in WAC 173-400-097(2). Ecology shall prepare a budget for administering the registration program using workload estimates identified in the workload analysis for the biennium.

(3) Registration fee schedule. Ecology's registration program budget shall be distributed to sources located in its jurisdiction according to the following:

(a) Sources requiring periodic registration and inspections shall pay an annual registration fee of four hundred dollars.

(b) Sources requiring annual registration and inspections shall pay a registration fee comprised of the following three components:

(i) Flat component. This portion of a source's fee shall be calculated by the equal division of thirty-five percent of the budget amount allocated to annual registration sources by the total number of sources requiring annual registration.

(ii) Complexity component. Each source is assigned a complexity rating of 1, 3, or 5 which is based on the estimated amount of time needed to review and inspect the source. This portion of the fee is calculated by dividing forty percent of the budget amount allocated to annually registered sources by the total complexity of sources located in ecology's jurisdiction. The quotient is then multiplied by an individual source's complexity rating to determine that source's complexity portion of the fee.

(iii) Emissions component. This portion of a source's fee is calculated by dividing twenty-five percent of the budget amount allocated to annually registered sources by the total billable emissions from those sources. The quotient is then multiplied by an individual source's billable emissions to determine that source's emissions portion of the fee. Billable emissions include all air pollutants except carbon monoxide and total suspended particulate.

(4) Regulatory orders. Owners or operators registering a source as a synthetic minor must obtain a regulatory order which limits the source's emissions. The owner will be required to pay a fee based on the amount of time required to research and write the order multiplied by an hourly rate of sixty dollars.

(5) Fee reductions for pollution prevention initiatives. Ecology may reduce registration fees for an individual source if that source demonstrates the use of approved pollution prevention measures or best management practices beyond those required of the source.

(6) Fee reductions for economic hardships. If a small business owner believes the registration fee results in an extreme economic hardship, the small business owner may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. The factors which ecology may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the registration fee through to customers; average annual profits, and cumulative effects of multiple site ownership. In no case will a registration fee be reduced below two hundred dollars.

(7) Fee payments. Fees specified in this section shall be paid within thirty days of receipt of ecology's billing statement. All fees collected under this regulation shall be made payable to the Washington department of ecology. A late fee surcharge of fifty dollars or ten percent of the fee, whichever is more, may be assessed for any fee not received after the thirty-day period.

(8) Dedicated account. All registration fees collected by ecology shall be deposited in the air pollution control account.

(9) Tracking revenues, time, and expenditures. Ecology shall track revenues collected under this subsection on a source-specific basis. Ecology shall track time and expenditures on the basis of ecology budget functions.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-104, filed 3/22/95, effective 4/22/95.]

WAC 173-400-171 Public involvement. (1) **Applicability.** Ecology or the authority shall provide public notice prior to the approval or denial of any of the following types of applications or other actions:

(a) Notice of construction application for any new or modified source or emissions unit, if a significant net increase in emissions of any pollutant regulated by state or federal law would result; or

(b) Any application or other proposed action for which a public hearing is required by PSD rules; or

(c) Any order to determine RACT; or

(d) An order to establish a compliance schedule or a variance; or

(e) The establishment or disestablishment of a nonattainment area, or the changing of the boundaries thereof; or

(f) An order to demonstrate the creditable height of a stack which exceeds the GEP formula height and sixty-five meters, by means of a fluid model or a field study, for the purposes of establishing an emission limitation; or

(g) An order to authorize a bubble; or

(h) Notice of construction application or regulatory order used to establish a creditable emission reduction;

(i) An order issued under WAC 173-400-091 which establishes limitations on a source's potential to emit; or

(j) Any application or other proposed action made pursuant to this chapter in which there is a substantial public interest according to the discretion of ecology or the authority.

(2) **Public notice.** Public notice shall be made only after all information required by ecology or the authority has been submitted and after applicable preliminary determinations, if any, have been made. The cost of providing public notice shall be borne by the applicant or other initiator of the action. Public notice shall include:

(a) Availability for public inspection in at least one location near the proposed project, of the nonproprietary information submitted by the applicant and of any applicable

preliminary determinations, including analyses of the effect(s) on air quality.

(b) Publication in a newspaper of general circulation in the area of the proposed project of notice:

(i) Giving a brief description of the proposal;

(ii) Advising of the location of the documents made available for public inspection;

(iii) Advising of a thirty-day period for submitting written comment to ecology or the authority;

(iv) Advising that a public hearing may be held if ecology or the authority determines within a thirty-day period that significant public interest exists.

(c) A copy of the notice will be sent to the EPA regional administrator.

Public participation procedures for notice of construction applications that are processed in coordination with an application to issue or modify an operating permit shall be conducted as provided in the state operating permit rule.

(3) **Public comment.** No final decision on any application or action of any of the types described in subsection (1) of this section, shall be made until the public comment period has ended and any comments received have been considered. Unless a public hearing is held, the public comment period shall be the thirty-day period for written comment published as provided above. If a public hearing is held the public comment period shall extend through the hearing date and thereafter for such period, if any, as the notice of public hearing may specify.

(4) **Public hearings.** The applicant, any interested governmental entity, any group or any person may request a public hearing within the thirty-day period published as above. Any such request shall indicate the interest of the entity filing it and why a hearing is warranted. Ecology or the authority may, in its discretion, hold a public hearing if it determines significant public interest exists. Any such hearing shall be held upon such notice and at a time(s) and place(s) as ecology or the authority deems reasonable.

(5) **Other requirements of law.** Whenever procedures permitted or mandated by law will accomplish the objectives of public notice and opportunity for comment, such procedures may be used in lieu of the provisions of this section.

(6) **Public information.** Copies of notices of construction, orders, and modifications thereof which are issued hereunder shall be available for public inspection on request at ecology or the authority.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-171, filed 3/22/95, effective 4/22/95; 93-18-007 (Order 93-03), § 173-400-171, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-171, filed 2/19/91, effective 3/22/91.]

Chapter 173-420 WAC
CONFORMITY OF TRANSPORTATION ACTIVITIES TO AIR QUALITY IMPLEMENTATION PLANS

WAC

WAC 173-420-020 Purpose and intent. This chapter implements RCW 70.94.037 of the Washington Clean Air Act (chapter 70.94 RCW). The law requires the departments of ecology and transportation to develop criteria and guidance for demonstrating and assuring conformity of transportation plans, programs, and projects to the purpose of the state implementation plan for attaining and maintaining the national ambient air quality standards and meeting the requirements of the federal Clean Air Act (42 U.S.C. 7401) as amended. This chapter is jointly adopted by the departments of ecology and transportation and can be amended only by agreement between the departments. This chapter sets forth minimum requirements for evaluating transportation plans, programs, and projects for conformity with the purpose and intent of state implementation plans for air quality. This chapter clarifies state policy and procedures to achieve national ambient air quality standards, foster long-range planning for attainment and maintenance of those standards, provide at least as stringent requirements as the federal conformity regulation (40 C.F.R. Part 51 Subpart T), provide a basis for evaluating conformity determinations, and guide state, regional, and local agencies in making conformity determinations.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-020, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-020, filed 1/22/93, effective 2/22/93.]

WAC 173-420-030 Scope. (1) Conformity determinations shall be made for the adoption, acceptance, approval, funding, or support of all transportation plans, improvement programs, and projects located in or affecting nonattainment and maintenance areas for any criteria pollutants.

(2) Regional transportation plans that contain either wholly or partially a nonattainment area for any criteria pollutant shall comply with this chapter. Transportation plans that do not contain either wholly or partially a nonattainment or maintenance area are exempt from this chapter.

(3) Transportation improvement programs shall comply with this chapter. The regional transportation improvement program shall include projects on the regional transportation system; transportation control measures of local government six-year street and road programs developed pursuant to RCW 36.81.121 and 35.77.010; and transit management plans developed pursuant to RCW 35.58.2795. Transportation improvement programs for areas that do not contain either wholly or partially a nonattainment or maintenance area for any criteria pollutants are exempt from this chapter.

(4) Projects contained in the regional transportation improvement program of a metropolitan area boundary and within a county that either wholly or partially contains a nonattainment area shall comply with this chapter. Projects not on the regional transportation system shall be considered to comply with the general provisions of this chapter; however they must be evaluated by the lead agency during

compliance with the requirements of the State Environmental Policy Act (SEPA), (chapter 197-11 WAC), to determine if a conformity analysis and determination based upon this chapter is warranted. Preservation or maintenance projects in WAC 173-420-110 are exempt from the conformity requirements of this chapter.

(5) Projects on the regional transportation system that are located outside a nonattainment area but affect traffic or air quality of a nonattainment area shall comply with WAC 173-420-060, 173-420-065 and 173-420-100.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-030, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-030, filed 1/22/93, effective 2/22/93.]

WAC 173-420-040 Definitions. The following definitions will apply unless a different meaning is clearly required by context:

"Criteria pollutants" means air pollutants for which a NAAQS has been promulgated under the federal Clean Air Act (40 C.F.R. 50) and their precursors and, for this chapter, applies only to those pollutants for which nonattainment or maintenance areas have been designated.

"Action scenario" means the future transportation system determined pursuant to the federal transportation conformity regulation (40 C.F.R. Part 51 Subpart T) in a year that is being analyzed for conformity that will result from the implementation of the proposed plan and/or transportation improvement program.

"Baseline scenario" means the transportation system determined pursuant to the federal transportation conformity regulation (40 C.F.R. Part 51 Subpart T) in a year that is being analyzed for conformity that would result from the plan, improvement program, and facilities, services, and activities that are in effect in the year the conformity analysis is being conducted.

"Lead agency" means the agency with primary responsibility for ensuring plan, program, or project compliance with SEPA, (chapter 197-11 WAC).

"Maintenance area" means any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainments subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended.

"Metropolitan area boundary" (MAB) means an area determined by an agreement between the governor and the MPO as defined in 23 U.S.C. 134.

"Metropolitan planning organization" (MPO) means an organization for each urbanized area of more than fifty thousand people as defined in 23 U.S.C. 134, whose responsibilities include development of transportation plans and improvement programs for those areas.

"Motor vehicle emission budget" means that portion of the total allowable emission defined in a state implementation plan for a certain date for the purpose of meeting attainment or maintenance demonstrations for any criteria pollutant or its precursors, that is allocated by the SIP to highway and transit vehicles.

"National ambient air quality standards" (NAAQS) means air quality standards promulgated for criteria pollutants under the federal Clean Air Act (40 C.F.R. 50). The standard for carbon monoxide is thirty-five parts per million over a one-hour period or nine parts per million over an eight-hour period. The standard for ozone is 0.12 parts per million over a one-hour period. The standard for PM10 is fifty $\mu g/m^3$ annual arithmetic mean or 150 $\mu g/m^3$ maximum twenty-four hour average concentration.

"Nonattainment area" means the geographic area designated as not meeting the NAAQS for a criteria pollutant. The boundaries are proposed by the governor, approved by the federal environmental protection agency (EPA), and include that area required to implement plans and programs for attainment of the NAAQS published in the federal register.

"Regional transportation system" means the transportation system identified by an MPO in development of planning requirements under the federal Intermodal Surface Transportation Efficiency Act (ISTEA) (P.L. 102-240).

"Regionally significant project" means a transportation project that is on a facility which serves regional transportation needs and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative for regional highway travel.

"State implementation plan" (SIP) means a plan as defined in section 302(q) of the CAA and which implements the relevant requirements of the CAA that is intended to eliminate or reduce the severity and number of violations of the national ambient air quality standards and expeditiously achieve those standards, and includes the revision referred to as the maintenance plan that provides for the maintenance of the NAAQS in the area concerned for at least ten years after the redesignation of a nonattaiment area to an attainment area.

"Transportation control measure" (TCM) means a transportation project, program, or action listed in the state implementation plan that will aid in elimination or reduction of the severity or number of violations of the national ambient air quality standards and help expeditiously attain and maintain those standards.

"Transportation improvement program" (TIP) means a schedule of intended transportation improvements (or continuation of current activities) as required in section 134 of Title 23 U.S.C. A TIP shall include projects within the MPO's area that are proposed for funding under Title 23 U.S.C. and the federal Transit Act, projects that are part of or consistent with the transportation plan as previously defined, and transportation control measures that are included in the state implementation plan for meeting NAAQS.

"Transportation plan" means a document that is required under the regulation implementing section 134 of Title 23 U.S.C., and section 8 of the federal Transit Act, and is intended to foster a continuing, cooperative, and comprehensive planning process.

"Transportation projects" means an action that expends funds on or approves physical and/or operational alterations to a transportation system.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-040, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-040, filed 1/22/93, effective 2/22/93.]

WAC 173-420-050 General provisions. (1) Conformity review will include transportation plans, improvement programs, and projects on the regional transportation system. The review utilizes requirements from the federal Clean Air Act, the Washington Clean Air Act (chapter 70.94 RCW), the Growth Management Act (GMA) (chapter 36.70A RCW), the State Environmental Policy Act (SEPA) (chapter 43.21C RCW), and the federal ISTEA (P.L. 102-240).

(2) Identification of transportation plans and improvement programs that affect nonattainment areas, identification of projects on the regional transportation system, and coordination and consistency among plans shall be accomplished through the planning processes required by the GMA and the ISTEA.

(3) Transportation plans and improvement programs on the regional transportation system within metropolitan area boundaries that contain nonattainment areas shall be coordinated through the MPO using the regional planning process required by ISTEA (P.L. 102-240).

(4) Transportation control measures shall be identified and incorporated into plans and programs through the SIP process required by the federal Clean Air Act.

(5) Early and continuous public participation shall be a component of the conformity process pursuant to requirements of the GMA (chapter 36.70A RCW) and ISTEA (P.L. 102-240). At least one public hearing shall be held on transportation plan and improvement program conformity determinations. Such hearings may be combined with general hearings required for the transportation plans or improvement programs. Public comment on project conformity shall be completed as part of the SEPA process (chapter 197-11 WAC).

(6) Disagreement over a conformity determination for a plan or program shall be presented in writing to the MPO and shall identify the changes considered necessary to achieve conformity. The MPO shall convene a meeting or meetings with the contesting party, parties of record, consulted agencies, and the state departments of ecology and transportation within fifteen working days of receipt of the written document contesting the determination. The meeting shall be to review the written reasons for contesting the determination. A written decision stating the changes, if any, in the conformity determination on the plan or program shall be provided to each of the meeting participants. The department of ecology or air pollution control authority may appeal the written decision, provided a written appeal to the governor is filed within fourteen calendar days of the written decision.

(7) Disagreements on project conformity findings shall be addressed through the SEPA process (chapter 197-11 WAC).

(8) If the classification or designation of a nonattainment or maintenance area changes, the next consultation meeting required under WAC 173-420-070 shall incorporate the criteria in the federal transportation conformity regulation (40 C.F.R. Part 93 Subpart A and 40 C.F.R. Part 51 Subpart T) that apply to the new classification or designation for use in all subsequent conformity determinations.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-050, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-050, filed 1/22/93, effective 2/22/93.]

WAC 173-420-055 SIP impacts on conformity determinations. (1) Until EPA redesignates a nonattainment area to an attainment area the status of the applicable SIP shall have the following impact on the conformity of plans, TIPs and projects:

(2) If the applicable SIP is not submitted by the deadline for submittal:

(a) Four months after the applicable deadline no new plan or TIP shall be found to conform; and

(b) Twelve months after the applicable deadline the conformity status of the existing plan and TIP shall lapse and no new project-level conformity determinations shall be made.

(3) If the SIP submittal for a PM10 NAA or for a CO NAA with a design value of 12.7 ppm or greater is found to be incomplete by EPA:

(a) If the incompleteness finding is because measures committed to in the SIP are not in an enforceable form as required by section 110 (a)(2)(A) of the CAA then twelve months after the finding the conformity status of the existing plan and TIP shall lapse;

(b) Four months after the finding no new plan or TIP shall be found to conform; and

(c) Twelve months after the finding the conformity status of the existing plan and TIP shall lapse and no new project-level conformity determinations shall be made.

(4) For a complete SIP for a PM10 NAA or for a CO NAA with a design value of 12.7 ppm or greater or for a maintenance plan disapproved by EPA:

(a) No new plan, TIP or project shall be found to conform;

(b) If the disapproval is because the measures committed to in the SIP are not in an enforceable form as required by section 110 (a)(2)(A) of the CAA then twelve months after the disapproval the conformity status of the existing plan and TIP shall lapse; and

(c) Four months after the disapproval the conformity status of the existing plan and TIP shall lapse and no new project-level conformity determinations shall be made.

(5) If a SIP submitted for a marginal ozone NAA or a CO NAA with a design value less than 12.7 ppm contains control strategies then the requirements of subsections (3) and (4) of this section shall apply.

(6) The provisions of subsections (2), (3), (4), and (5) of this section shall be removed upon receipt of a letter from the EPA regional administrator acknowledging remedying of the deficiencies.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-055, filed 8/25/95, effective 9/25/95.]

WAC 173-420-060 General criteria. (1) Transportation plans, improvement programs, and projects shall meet the purpose and intent of the current SIP of eliminating or reducing the severity and number of violations of the NAAQS and expeditiously achieving those standards, comply with the federal transportation conformity regulations, (40 C.F.R. Part 51 Subpart T), and shall not preclude the implementation of any transportation control measures identified in the SIP.

(2) All transportation plans, improvement programs, and projects shall comply with the criteria in subsection (3) of

this section, in addition to the specific criteria contained in WAC 173-420-080, 173-420-090, and 173-420-100, respectively.

(3) Transportation plans, improvement programs, or projects shall not:

(a) Cause or contribute to any new violation of the NAAQS;

(b) Increase the frequency or severity of any existing violation of the NAAQS; or

(c) Delay the timely attainment of the NAAQS.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-060, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-060, filed 1/22/93, effective 2/22/93.]

WAC 173-420-065 Specific criteria. (1) All transportation plans, improvement programs, and projects shall comply with the criteria in subsections (2), (3), and (4) of this section.

(2) At all times the following criteria shall be met:

(a) The conformity determination for plans, TIPs, and projects shall:

(i) Be based on the latest planning assumptions.

(ii) Be based on the latest EPA approved emission estimation model available.

(iii) Be made according to the consultation procedures contained in WAC 173-420-070.

(b) The plan and TIP shall provide for the timely implementation of TCMs from the SIP or maintenance plan.

(c) There shall be a currently conforming plan and currently conforming TIP at the time of project approval.

(d) The project shall come from a conforming plan and conforming TIP.

(e) In CO and PM10 nonattainment and maintenance areas the project shall not cause or contribute to any new localized CO or PM10 violations or increase the frequency or severity of any existing CO or PM10 violations.

(f) In PM10 nonattainment and maintenance areas the project shall comply with PM10 measures in the applicable SIP or maintenance plan.

(3) Until approval of an applicable SIP by EPA the following criteria shall also be met:

(a) Plans and TIPs:

(i) In O3 nonattainment areas the action scenario emissions shall be less than the baseline scenario emissions.

(ii) In O3 nonattainment areas the action scenario emissions shall be less than the 1990 emissions.

(iii) In all CO nonattainment areas the action scenario emissions shall be less than the baseline scenario emissions.

(iv) In all CO nonattainment areas the action scenario emissions shall be less than the 1990 emissions.

(v) In CO nonattainment areas with a design value of 12.7 ppm or greater, the emissions shall be less than or equal to the motor vehicle emissions budget.

(vi) In PM10 nonattainment areas the emissions shall be less than or equal to the motor vehicle emissions budget.

(vii) In PM10 nonattainment areas the action scenario emissions shall be less than or equal to the baseline scenario emissions or the 1990 emissions.

(b) Projects in CO nonattainment areas shall eliminate or reduce the severity and number of localized CO violations in the area substantially affected by the project.

(4) After approval of the SIP by EPA or when the maintenance plan is in effect the following criteria shall be met:

(a) The plan and TIP shall be consistent with the Motor Vehicle Emissions Budget (MVEB) in the applicable SIP or maintenance plan.

(b) No additional criteria are required for projects.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-065, filed 8/25/95, effective 9/25/95.]

WAC 173-420-070 Air quality analysis procedures. (1) Air quality analysis for transportation plans, programs, and projects shall be modeled for criteria pollutants using EPA and the federal Department of Transportation approved methods.

(2) Air quality analysis procedures and methodology used in determining conformity for transportation plans and improvement programs shall be determined through consultation with the MPO, the United States Department of Transportation and the Environmental Protection Agency, the state departments of ecology and transportation, the local air authority, and other interested representatives of the public. The consultation procedure for SIP and maintenance plan development in the applicable SIP shall be used for the consultation process required by this section. The consultation process shall also be used for determining research and data collection efforts, and regional transportation model development, events that will trigger new conformity determinations, the status of TCMs, significant changes in project design and scope, and projects which require PM10 analysis. The specific analysis procedures and methodology selected shall comply with this chapter, the federal transportation conformity regulation (40 C.F.R. Part 51 Subpart T), and the applicable SIP. Agreement on the methods and assumptions including modeling parameters, model accuracy, and the base year against which alternatives are compared, shall be reached on all programs and plans prior to the conformity determination. Procedures, methodologies, and input parameters shall be reviewed and updated at least once every two years under the direction of the departments of ecology and transportation. Such review shall occur prior to conformity determination of transportation plan or TIP revisions.

(3) Procedures, methodologies, and assumptions for project analysis shall be consistent with those procedures, methodologies, and assumptions developed for analysis of transportation plans and improvement programs in subsection (2) of this section.

(4) Each MPO shall conduct conformity analyses of the transportation plan and improvement program developed in its region.

(5) The lead agency shall be responsible for project conformity analysis.

(6) The impact of preferred alternative transportation plans, improvement programs, and projects shall be quantified and compared for compliance to the SIP requirements, and the requirements of WAC 173-420-060, and 173-420-065. If modeling does not indicate that the requirements of this section are met, mitigating measures shall be required and the plan, improvement program, or project remodeled.

All else being equal, the alternative with the lowest concentration shall be chosen over all other alternatives.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-070, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-070, filed 1/22/93, effective 2/22/93.]

WAC 173-420-080 Transportation plan conformity. Transportation plans shall include policies and provisions that promote the reduction of criteria pollutants. Transportation plans shall identify those aspects of the existing transportation system whose modification offers the best opportunity for improving air quality. Transportation plans shall include descriptions of the existing and proposed transportation system in sufficient detail, to permit conformity determinations using the criteria in WAC 173-420-060 and 173-420-065. Plans shall be analyzed with regional emission analysis for criteria pollutants. Local plans that are consistent under RCW 47.80.030 with a conforming regional transportation plan are deemed to comply with this chapter provided that the requirements of WAC 173-420-050 are met. Upon a conformity finding by the MPO, the plan shall be submitted to the United States Department of Transportation for federal conformity determination.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-080, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-080, filed 1/22/93, effective 2/22/93.]

WAC 173-420-110 Exempt projects. The following types of projects because of their nature, will not affect the outcome of any air quality analyses nor add any substance to those analyses and are exempted from all conformity requirements.

(1) Safety, preservation, or maintenance projects of the following type:

(a) Railroad/highway crossing signing;

(b) Pavement marking that does not add lanes or capacity;

(c) Hazard elimination program;

(d) Off-system road safety;

(e) Emergency relief;

(f) Shoulder improvements;

(g) Truck size and weight inspection stations;

(h) Safety improvement program;

(i) Railroad/highway crossing warning devices;

(j) Increasing sight distance that does not require changes in horizontal or vertical alignments;

(k) Guardrails, median barriers, crash cushions;

(l) Pavement resurfacing or rehabilitation;

(m) Widening narrow pavements or bridges (less than one travel lane);

(n) Noise attenuation;

(o) Fencing;

(p) Skid treatments;

(q) Safety roadside rest areas;

(r) Truck climbing lanes outside the urbanized area;

(s) Lighting improvements;

(t) Median additions;

(u) Emergency truck pullovers.

(2) Mass transit projects of the following type:

(a) Purchase of office, shop, and operating equipment for existing facilities;

(b) Purchase of operating equipment for vehicles, including ferries, trains, and buses;

(c) Construction or renovation of power, signal, and communication systems;

(d) Operating assistance;

(e) Rehabilitation of transit vehicles, including buses, ferries, and trains;

(f) Reconstruction or renovation of transit buildings and structures;

(g) Construction of small passenger shelters and information/ticketing kiosks;

(h) Rehabilitation or reconstruction of track structures, track, and trackbed in existing right of way;

(i) Noise attenuation;

(j) Purchase of vehicles to replace existing vehicles or for minor expansions of fleets to provide new service (less than five percent per year);

(k) Construction of new vehicle storage and maintenance facilities;

(l) Purchase of support vehicles.

(3) Air quality projects of the following type:

(a) Continuation of rideshare and vanpooling promotion activities at current levels;

(b) Bicycle projects;

(c) Pedestrian facilities.

(4) Other projects of the following type:

(a) Acquisition of scenic easements;

(b) Planting and landscaping;

(c) Sign removal;

(d) Wetland mitigation, fish passage mitigation, and other environmental mitigation not related to air quality;

(e) Historical and cultural markers;

(f) Preliminary engineering through design, provided that funds are not expended or assurance is not made that will commit to the construction of a project;

(g) Access permits except when there is a break in full, modified, or partial access control;

(h) Advanced land acquisitions that do not influence the environmental assessment of a project, the decision of the need to construct the project, or the selection of project design or location;

(i) Planning and technical studies that do not commit to project implementation;

(j) Training and research programs;

(k) Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-110, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-110, filed 1/22/93, effective 2/22/93.]

WAC 173-420-120 Projects exempt from regional analysis. The following types of projects because of their nature, will not affect the outcome of regional air quality emissions analyses nor add substance to those analyses and are exempted from regional conformity analysis. Project level conformity analysis is required for these types of projects.

(1) Intersection channelization projects;

(2) Intersection signalization projects at individual intersections;

(3) Interchange reconfiguration projects;

(4) Changes in vertical and horizontal alignment;

(5) Truck size and weight inspection stations;

(6) Bus terminals and transfer points.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-120, filed 8/25/95, effective 9/25/95.]

Chapter 173-422 WAC
MOTOR VEHICLE EMISSION INSPECTION

WAC

WAC 173-422-020 Definitions. Unless a different meaning is clearly indicated by context, the following definitions will apply:

(1) "Appropriate repair" means the diagnosis of the cause(s) of an emission test failure and the repair of one or more of these causes. An appropriate repair should reduce at least one emission test reading.

(2) "Certificate of acceptance" means an official form, issued by someone authorized by the department, which certifies that the following conditions have been met:

(a) The vehicle failed an emission inspection; and

(b) The vehicle failed a reinspection; and

(c) The vehicle has been in use for more than five years or fifty thousand miles; and

(d) All primary emission control components installed by the vehicle manufacturer, or its appropriate replacement, are installed and operative; and

(e) The recipient has provided original receipts listing and providing the cost of each appropriate repair performed by an authorized emission specialist between the initial and last inspection; and

(f) The total cost of the appropriate repairs must equal or exceed:

Pre-1981 vehicles	$100
1981 and newer	$150

If needed to prevent federal sanctions, the minimum total cost of appropriate repairs required to obtain a certificate of acceptance may be increased to four hundred fifty dollars.

Before increasing the repair cost requirement ecology shall evaluate ways to alleviate the economic hardships resulting from vehicle repair costs incurred by vehicle owners in an effort to comply with this regulation.

(3) "Certificate of compliance" means an official form, issued by someone authorized by the department, which certifies that the recipient's vehicle on inspection complied with applicable emission inspection standards.

(4) "Authorized emission specialist" means an individual who has been issued a certificate of instruction by the department as authorized in RCW 70.120.020 (2)(a) and has maintained the certification by meeting requirements of WAC 173-422-190(2).

(5) "Dealer" means a motor vehicle dealer, as defined in chapter 46.70 RCW as amended, that is licensed pursuant to chapter 46.70 RCW.

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

(7) "Emission contributing area" means a land area within whose boundaries are registered motor vehicles that contribute significantly to the violation of motor vehicle related air quality standards in a noncompliance area.

(8) "Fleet" means a group of fifteen or more motor vehicles owned or leased concurrently by one owner assigned a fleet identifier code by the department of licensing.

(9) "Gross vehicle weight rating (GVWR)" means the manufacturer stated gross vehicle weight rating.

(10) "Motor vehicle" means any self-propelled vehicle required to be licensed pursuant to chapter 46.16 RCW.

(11) "Noncompliance area" means a land area within whose boundaries any air quality standard for any air contaminant from the emissions of motor vehicles will probably be exceeded.

(12) "PPM" means parts per million by volume.

(13) "Primary emission control components" means the components of the vehicle installed by the manufacturer for the purpose of reducing emissions or its replacement or modification which is acceptable to the United States Environmental Protection Agency. These components are the fuel inlet restrictor, the catalytic converter or thermal reactor, the air injection system components, the thermostatic air cleaner, the exhaust gas recirculation system components, the evaporative emission system components including the gas cap, the positive crankcase ventilation system components and the electronic control unit components that control the air/fuel mixture and/or ignition timing including all related sensors.

The primary emission control components of a vehicle with a different engine than the engine originally installed shall be an Environmental Protection Agency certified engine/emission control combination for that vehicle or its newer model.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-020, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-020, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-020, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-020, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-020, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-020, filed 2/28/80.]

WAC 173-422-030 Vehicle emission inspection requirement. All motor vehicles, not specifically exempted by WAC 173-422-170, which are registered or reregistered within the boundaries of an emission contributing area, as specified in WAC 173-422-050, are subject to the vehicle emission inspection requirements of this chapter. In addi-

tion, the department may require an emission inspection of a motor vehicle, except military tactical vehicles, operated for more than sixty days a year on a federal installation located within an emission contributing area, or a vehicle garaged at a location within an emission contributing area, or a vehicle which has previously passed an emission inspection but has been identified using on road testing as likely to no longer comply with the inspection standards. Neither the department of licensing nor its agents may change the registered owner or may issue or renew a motor vehicle license for any vehicle registered in an emission contributing area, as that area is established under RCW 70.120.150, unless the application for issuance or renewal is: (1) Accompanied by a valid certificate of compliance issued pursuant to RCW 70.120.080 or 70.120.170 or a valid certificate of acceptance issued pursuant to RCW 70.120.070; or (2) exempted from this requirement pursuant to RCW 46.16.015(2). The certificates must have a date of validation which is within six months of the date of application for the vehicle license, license renewal or registered owner change. Certificates for fleet or owner tested vehicles may have a date of validation which is within twelve months of the assigned license renewal date.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-030, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-030, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-030, filed 5/3/93, effective 6/3/93. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-030, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-030, filed 2/28/80.]

WAC 173-422-035 Registration requirements. (1) Persons residing in emission contributing areas as defined under WAC 173-422-050 shall register their motor vehicles within that area.

(2) Any person who violates this section shall reregister their motor vehicle within the emission contributing area, obtain a certificate of compliance or acceptance within thirty days, and is subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(3) Any civil penalty imposed by the department hereunder shall be appealable to the pollution control hearings board as provided for in chapter 43.21B RCW.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-035, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-035, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-035, filed 3/6/90, effective 4/6/90.]

WAC 173-422-050 Emission contributing areas. Emission contributing areas within which the motor vehicle emission inspection program applies are designated by the following United States Postal Service ZIP codes as of September 1, 1994, set forth below:

(1) Puget Sound Region

98001	98036	98083
98002	98037	98092
98003	98038	98093
98004	98039	98101 thru 98199
98005	98040	inclusive except 98110
98006	98041	98201 thru 98208
98007	98042	98258
98008	98043	98270
98009	98046	98271
98011	98047	98275
98012	98052	98290
98015	98053	98291
98020	98054	98327
98021	98055	98332
98023	98056	98335
98025	98057	98338
98026	98058	98344
98027	98059	98352
98028	98062	98354
98031	98063	98371 thru 98374
98032	98064	98387
98033	98071	98388
98034	98072	98390
98035	98073	98401 thru 98499

(2) Spokane Region

99001
99005
99014
99016
99019
99021
99025
99027
99037
99201 thru 99299

(3) Vancouver Region

98607
98660 thru 98668
98671 except Skamania County
98682-86

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-050, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-050, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-050, filed 5/3/93, effective 6/3/93; 84-09-087 (Order DE 84-7), § 173-422-050, filed 4/18/84. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-050, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-050, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-050, filed 2/28/80.]

WAC 173-422-060 Gasoline vehicle emission standards. Gasoline motor vehicles subject to this chapter shall:

Meet the applicable exhaust emission standards from the following table prior to receiving a certificate of compliance.

Exhaust Emission Standards

Model Year	CO(%)*	HC (ppm)*
68-74	6.0	900
75-80	3.0	600
81-99 (0-8500 GVWR)	1.2	220
81-99 (Greater than 8500 GVWR)	3.0	400

* The concentration of the gases, carbon monoxide (CO) and hydrocarbons (HC), measured as either a percentage (%) or parts per million (ppm) of the exhaust volume.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-060, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-060, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-060, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-060, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-060, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-060, filed 2/28/80.]

WAC 173-422-065 Diesel vehicle exhaust emission standards. Diesel motor vehicles subject to this chapter shall meet the following opacity standards using the test procedures specified in WAC 173-422-075.

Model Year	Opacity (%)
1968 - 1973	70
1974 - 1991	60
1992 and later	40

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-065, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-065, filed 5/3/93, effective 6/3/93.]

WAC 173-422-070 Gasoline vehicle exhaust emission testing procedures. All persons certified by, or under contract to, the department to conduct motor vehicle emission inspections shall use the exhaust emission testing procedures described in (II) Two Speed Idle Test; or (III) Loaded Test of Appendix B-Test Procedures of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, unless equivalent procedures have been approved by the department.

Variations to the procedures specified may be established by the department for all or certain vehicles. Vehicles, not repaired as required by an emission recall for which owner notification was attempted after January 1, 1995, shall not be inspected until compliance with the recall is established.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-070, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-070, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-070, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-070, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-070, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-070, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-070, filed 2/28/80.]

WAC 173-422-090 Exhaust gas analyzer specifications. Only exhaust gas analyzers meeting the specifications contained in (I) Steady-State Exhaust Analysis System of Appendix D-Steady-State Short Test Equipment of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, at the time of certification testing may be used for certification testing, unless equivalent specifications have been approved by the department.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-090, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-090, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-090, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-090, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-090, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-090, filed 2/28/80.]

WAC 173-422-100 Testing equipment maintenance and calibration. (1) Unless alternative procedures have been approved or required by the department all equipment used in the inspection shall be calibrated and maintained according to the manufacturer's specifications and recommendations. Complete logs as approved by the department shall be kept for maintenance, repair, and calibration.

(2) The procedures for equipment maintenance and calibration procedures described in (I) Steady-State Test Equipment of Appendix A-Calibrations, Adjustments and Quality Control of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, shall be followed by all testing facilities unless equivalent procedures have been approved by the department.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-100, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-100, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-100, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-100, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-100, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-100, filed 2/28/80.]

WAC 173-422-120 Quality assurance. The department, or its designee, may monitor the operation of each authorized emission inspection/certification facility with unidentified or unannounced and unscheduled inspections to check the calibration and maintenance of the exhaust analyzers, test procedures, and records.

The department (or its designee) may immediately require the suspension of vehicle inspections/certifications in all or part by the inspection/certification facility if violations of this chapter are found during an audit of the inspection facility.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-120, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-120, filed 5/3/93, effective 6/3/93. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-120, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-120, filed 2/28/80.]

WAC 173-422-160 Fleet and diesel owner vehicle testing requirements. The department may authorize emission inspections by fleet operators including government agencies and the owners of diesel motor vehicles with a gross vehicle weight rating in excess of 8500 pounds or by an automotive service or testing facility engaged by the vehicle owner for such activity. Authorizations to conduct emission tests and issue certificates of compliance under this section are limited to authorized fleet vehicles or diesel vehicles with a gross vehicle weight rating in excess of 8500 pounds.

(1) All persons engaged in testing of gasoline fleet or diesel vehicles must comply with all applicable provisions of this chapter except as approved by the department.

(2) All persons conducting tests for the purpose of issuing certificates for fleet or diesel vehicles shall be ecology authorized emission specialists.

(3) Legibly completed forms will constitute certificates of compliance for licensing purposes. Any person conducting testing under this section shall forward to the department within ten working days after the end of each month, a copy of each certificate of compliance issued during that month. Copies of each certificate of compliance shall be retained by the person issuing the certificate for at least two years from date of issuance. Alternative arrangements for providing and or storing this information using automated data storage devices may be approved or required by the department.

Forms must be purchased from the department in advance of issuance through payment of twelve or less dollars to the department for each certificate requested. Refunds or credit may be given for unused certificates returned to the department.

Payment for fleet forms is waived for state and local government fleets.

Test forms provided under this section are official documents. Persons receiving the forms from the department are accountable for each form provided.

Voided forms must be handled the same as certificates of compliance. One copy shall be sent to the department within ten days after the end of the month in which the form was voided and one copy shall be retained by the person accountable for the forms for at least two years after date of voiding. Refunds will not be made for voided forms.

(4) All persons authorized to conduct fleet or government vehicle inspections under this section shall be subject to performance audits and compliance inspections by the department, during normal business hours.

(5) Fleet vehicles may be inspected any time between their scheduled license renewals.

(6) Certificates of acceptance may not be issued under this section.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-160, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-160, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-160, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-160, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-160, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-160, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-160, filed 2/28/80.]

WAC 173-422-170 Exemptions. The following motor vehicles are exempt from the inspection requirement:

(1) Vehicles proportionally registered pursuant to chapter 46.85 RCW.

(2) Vehicles whose model year is 1967 or earlier.

(3) New motor vehicles whose equitable or legal title has never been transferred to a person who in good faith purchases the vehicle for purposes other than resale; this does not exempt motor vehicles that are or have been leased.

(4) Motor vehicles that use propulsion units powered exclusively by electricity.

(5) Motor-driven cycles as defined in chapter 46.04 RCW as amended.

(6) Farm vehicles as defined in chapter 46.04 RCW as amended.

(7) Vehicles not required to be licensed.

(8) Mopeds as defined in chapter 46.04 RCW as amended.

(9) Vehicles garaged and operated out of the emission contributing area.

(10) Vehicles registered with the state but not for highway use.

(11) Used vehicles at the time of sale by a Washington licensed motor vehicle dealer.

(12) Motor vehicles fueled by propane, compressed natural gas, or liquid petroleum gas and so registered by the department of licensing.

(13) Motor vehicles whose manufacturer or engine manufacturer provides information that the vehicle cannot meet emission standards because of its design. In lieu of exempting these vehicles, alternative standards and or inspection procedures may be established.

(14) Motor vehicles whose registered ownership is being transferred between parents, siblings, grandparents, grandchildren, spouse or present co-owners and all transfers to the legal owner or a public agency.

(15) To ensure a biennial inspection of vehicles registered in the emission contributing areas, motor vehicles with model year matching (even to even, odd to odd) the expiration year of the license being purchased. This does not apply to vehicles being inspected because the registered owner is being changed.

(16) When the model year of the vehicle is the same as the year in which the vehicle's license expires.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-170, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-170, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-170, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-170, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-170, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-170, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-170, filed 2/28/80.]

WAC 173-422-190 Emission specialist authorization. (1) To become an authorized emission specialist an individual shall:

(a) Pass a course of study, approved by the department; and

(b) Agree in writing to meet the requirements of subsection (2) of this section and all requirements of law or regulation regarding the serving of motor vehicle emission control systems or the motor vehicle emission inspection program.

(2) To maintain certification, an authorized emission specialist shall:

(a) Successfully complete a department-approved course on emission repair within twelve months of being required to do so by the department; and

(b) Sign, including the specialist identification number, all receipts and other forms required by the department for emission repairs or adjustments performed. These receipts must be prenumbered, preprinted with the business's name and address and clearly itemize all appropriate repairs performed by the specialist; and

(c) Record on all receipts:

(i) The vehicle's emission readings after appropriate repairs; and

(ii) A vehicle description including the license number and vehicle identification number (VIN); and

(iii) Any missing or inoperative primary emission control components; and

(iv) Any further recommended appropriate repairs; and

(d) Not tamper with emission control systems, including adjusting an engine outside of the manufacturer's specifications (chapter 173-421 WAC); and

(e) Not obtain or attempt to obtain a certificate of compliance, a certificate of acceptance (repair waiver) or an exemption from the inspection requirements by providing false information or by any fraudulent means (chapter 173-422 WAC); and

(f) Not aid or abet any individual in committing a violation of chapter 173-421 or 173-422 WAC.

(3) The certification of an authorized emission specialist may be revoked for a first violation of chapter 173-421 WAC or WAC 173-422-145, for a period of no more than one year, and may be permanently revoked for a second violation of chapter 173-421 or 173-422 WAC.

The certification of an authorized emission specialist may be temporarily revoked for violation of subsection (2) of this section and may be permanently revoked for continued willful violation of subsection (2) of this section.

An authorized emission specialist whose certification is revoked permanently or temporarily may appeal to the pollution control hearings board as provided for in RCW 43.21B.310.

(4) An authorized emission specialist whose certification has been temporarily revoked may reapply for certification twelve months after the date of revocation by applying to the department and meeting all requirements of subsection (1) of this section. An application for certification by a permanently revoked authorized emission specialist will be denied.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-190, filed 2/28/95, effective 3/31/95; 90-06-062, § 173-422-190, filed 3/6/90, effective 4/6/90.]

WAC 173-422-195 Listing of authorized emission specialists. (1) A list of authorized emission specialists will be available to the public. Specialists will be listed under one employer's business name when the business is approved for listing. The list will be updated by the department at least once every six months.

(2) The employer's business name and address will be listed by the department, when the employer agrees in writing to:

(a) Require the use of a properly maintained and correctly calibrated exhaust analyzer as a final check for emission repairs or adjustments;

(b) Have all emission repairs or adjustments performed by an authorized emission specialist;

(c) Require the authorized emission specialist to sign the customer's receipt for emission repairs or adjustments, and to record the vehicle's emission readings on the receipt after the work is completed;

(d) Require that all employees not aid or abet any person to tamper with emission control systems, including adjusting a vehicle outside of the manufacturer's specifications (chapter 173-421 WAC); and

(e) Require that all employees not aid or abet any person to obtain a fraudulent certificate of compliance, certificate of acceptance or an exemption from the inspection requirement (repair waiver) (chapter 173-422 WAC).

(f) Notify the department when an authorized emission specialist begins or ends employment.

(3) An employer may be removed from the authorized emission specialist list for a first violation of chapter 173-421 or 173-422 WAC for a period of no more than one year and may be permanently removed after a second violation of chapter 173-421 or 173-422 WAC.

An employer may be temporarily removed from the authorized emission specialist list when failing to comply with the requirements of subsection (2) of this section and may be permanently revoked for continued and willful violation of subsection (2) of this section.

(4) An employer who has been temporarily removed from the authorized emission specialist list may reapply for listing twelve months after the date of removal from the listing by applying to the department and meeting all requirements of subsection (2) of this section. An application for listing from an employer permanently removed from the authorized emission specialist list will be denied.

(5) An employer who is removed from an authorized emission specialist list or denied listing in an authorized emission specialist list may appeal to the pollution control hearings board as provided for in RCW 43.21B.310.

(6) (a) An employer approved for listing may display the "state authorized emission specialist" sign available from the department. Any employer advertising or providing of information to the public based on the department's certification of an authorized emission specialist must be discontinued immediately when the employer no longer meets the requirements.

(b) An employer violating (a) of this subsection shall be subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(c) A civil penalty imposed by the department may be appealed to the pollution control hearings board as provided for in RCW 43.21B.310.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-195, filed 2/28/95, effective 3/31/95; 90-06-062, § 173-422-195, filed 3/6/90, effective 4/6/90.]

Chapter 173-430 WAC
AGRICULTURAL BURNING

WAC

WAC 173-430-010 Purpose of the regulation. This chapter, promulgated under chapter 70.94 RCW, the Washington Clean Air Act, authorizes the department of ecology to implement the provisions of that act. This rule establishes controls for agricultural burning in the state in order to minimize adverse health and the environment effects from agricultural burning. The control strategies include:

(1) Establishing a permit program with minimum statewide requirements.

(2) Providing for implementation of a research program to explore and identify economical and practical alternatives to agricultural burning.

(3) Encouraging and developing economically feasible alternative methods to agricultural burning.

(4) Limiting the scope of the rule to agricultural burning and distinguishing between agricultural burning and other types of burning.

(5) Providing for local administration of the permitting program through delegation.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-010, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-010, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-010, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-010, filed 11/9/77. Formerly WAC 18-16-010.]

WAC 173-430-020 General applicability. This regulation applies to burning related to agricultural activities and includes the burning of fields, prunings, weeds, and irrigation ditches, drainage ditches, fence rows or other essential pathways. It does not apply to silvicultural burning or open burning.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-020, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-020, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-020, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-020, filed 11/9/77. Formerly WAC 18-16-020.]

WAC 173-430-030 Definition of terms. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the meanings of the following words and phrases used in this chapter are listed below.

(1) **Agricultural burning:** Means the burning of vegetative debris from an agricultural operation necessary for disease or pest control, necessary for crop propagation and/or crop rotation, or where identified as a best management practice by the agricultural burning practices and research task force established in RCW 70.94.650 or other authoritative source on agricultural practices.

(2) **Agricultural operation:** Means a farmer who can substantiate that the operation is commercial agriculture by showing the most recent year's IRS schedule F form or proof that the land is designated in a classification for agricultural use. It also includes burning conducted by irrigation district or drainage district personnel as part of water system management.

(3) **Ag task force:** Means the agricultural burning practices and research task force.

(4) **Best management practice:** Means the criteria established by the agricultural burning practices and research task force (Ag task force).

(5) **Department:** Means the department of ecology.

(6) **Farmer:** Means any person engaged in the business of growing or producing for sale upon their own lands, or upon the land in which they have a present right of possession, any agricultural product. Farmer does not mean persons using such products as ingredients in a manufacturing process, or persons growing or producing such products primarily for their own consumption.

(7) **Open burning**: Means all forms of burning except those listed as exempt in WAC 173-425-020.

(8) **Permitting authority:** Means a local air authority (and the department where no local air authority exists) or their delegate. Conservation districts, counties, fire districts, or fire protection agencies may receive delegation for all or portions of the agricultural burning permit program as identified in a delegation agreement. The permitting authority will issue agricultural burning permits for a given locale.

(9) **Silvicultural burning**: Means burning on any land the department of natural resources protects per RCW 70.94.030(13), 70.94.660, 70.94.690, and pursuant to chapter 76.04 RCW.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-030, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-030, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-030, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-030, filed 11/9/77. Formerly WAC 18-16-030.]

WAC 173-430-040 Agricultural burning requirements. (1) Agricultural burning is allowed when it is reasonably necessary to carry out the enterprise. A farmer can show it is reasonably necessary when it meets the criteria of the best management practices and no practical alternative is reasonably available.

(2) All agricultural burning requires a permit.

(a) To qualify for an agricultural burning permit the farmer must be an agricultural operation or government entity with specific agricultural burning needs, such as irrigation districts, drainage districts, and weed control boards.

(b) A farmer must fill out the information requested on a permit application (or the permit) and return it to the permitting authority.

(i) The permitting authority may require the farmer to fill out an application prior to issuing a permit.

(ii) The application must describe the reason for burning and include at least the following information: Name and address of the person or corporation responsible for the burn, the specific location (county; legal description: Range, section, township, block and unit number), the crop type, the type or size of the burn, directions to the burn, specific reason for the burn, the target date for burning, and any additional information required by the permitting authority. Each permitting authority may require additional information on the application.

(iii) All applications must comply with other state or local regulations.

(c) The permitting authority must evaluate the application, if there is one, and approve the permit prior to burning.

(d) Local air agencies (and the department where no local air agency exists) may issue permits for appropriate agricultural burning activities in nonattainment and urban growth areas.

(3) All agricultural burning permits require a fee. After January 1, 1995, the fee is the greater of:

(a) A minimum fee of twenty-five dollars per year per farm based on burning up to ten acres or equivalent which will be used as follows: Twelve dollars and fifty cents of which goes to the agricultural burning research fund and the remainder will be kept by the permitting authority to cover the costs of administering and enforcing this regulation; or

(b) A variable fee based on the acreage or equivalent of agricultural burning which will be used as follows: Up to one dollar per acre for applied research, twenty-five cents per acre for ecology administration and up to one dollar and twenty-five cents per acre for local permit program administration.

(i) Local permitting program administration. One portion of the fee shall cover the permitting authority's costs of administering and enforcing the program. The permitting authority may set the fee as an amount per farm per year, a set amount per fire, or a set rate no greater than one dollar and twenty-five cents per acre burned. The permitting authority must establish this portion of the fee by an appropriate, public process such as a local rule, ordinance, or resolution. In areas of the state where the department is the permitting authority this portion of the fee shall be one dollar and twenty-five cents per acre burned.

(ii) Ecology administration. Another portion of the fee shall be twenty-five cents per acre burned and cover the state-wide administrative, education, and oversight costs of the department. The amount (if any) by which the annual total, of this portion of the fee, exceeds the annual state-wide administrative, education, and oversight costs shall be deposited in the agricultural burning research fund of the air pollution control account.

(iii) Research fund. A final portion, the agricultural burning applied research portion, of the fee shall be no greater than one dollar per acre burned. The amount assessed may be less than one dollar per acre burned as periodically determined by the Ag task force based on applied research needs, regional needs and the research fund budget. The research portion of the fee assessed shall be fifty cents per acre burned starting in calendar year 1995. The Ag task force may also establish discounted assessment rates based on the use of best management practices.

(c) A farmer must pay the fee prior to receiving a permit. Refunds are allowed for portions not burned provided the adjusted fee after subtracting refunds is no less than twenty-five dollars.

(d) The agricultural burning practices and research task force may set acreage equivalents, for nonfield style agricultural burning practices, based on the amount of emissions relative to typical field burning emissions. Any acreage equivalents, established by rule, shall be used in determining fees. For agricultural burning conducted by irrigation or drainage districts, each mile of ditch (including banks) burned is calculated on an equivalent acreage basis.

(4) All agricultural burning permits must be conditioned to minimize air pollution.

(a) A farmer must comply with the conditions on the agricultural burning permit.

(b) For purposes of protecting public health (not eliminating agricultural burning), if an area exceeds or threatens to exceed unhealthy air pollution levels, the permitting authority may limit the number of acres, on a pro rata basis, or as provided by RCW 70.94.656.

(c) Permits must be conditioned to minimize emissions insofar as practical, including denial of permission to burn during periods of adverse meteorological conditions.

(5) Other laws. A farmer must obtain any local permits, licenses, or other approvals required by any other laws, regulations, or ordinances. The farmer must also honor other agreements entered into with any federal, state, or local agency.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-040, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-040, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-040, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-040, filed 11/9/77. Formerly WAC 18-16-040.]

WAC 173-430-050 Best management practices. (1) The Ag task force must identify best management practices for agricultural burning that are economically feasible and socially acceptable. Practical alterative production methods and controls which would reduce or eliminate agricultural burning must be used when reasonably available.

(2) The Ag task force may establish an agricultural burning general best management practice and crop-specific best management practices as appropriate. The Ag task force will work in conjunction with conservation districts and extension agents or other local entities in developing best management practices. The Ag task force may review and approve crop-specific best management practices which have been developed or recommended by an individual or group.

(3) Approved best management practices information will be available from permitting authorities. The Ag task force, as it deems necessary, will hold public workshops on best management practices that have changed or are new and will periodically review the best management practices starting three years after approval.

(4) The Ag task force will clarify best management practices and make interpretative decisions as needed, considering all authoritative sources on the subject.

(a) An individual or group may request a best management practice clarification from the task force.

(b) The chair of the Ag task force may direct the questioned practice to a subgroup of task force members, provided that agricultural, research, and regulatory interests are included and all task force members are notified, or may direct it to the whole AG task force.

(5) The Ag task force will modify best management practices as necessary to incorporate the latest research.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-050, filed 1/17/95, effective 2/17/95. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-050, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-050, filed 11/9/77. Formerly WAC 18-16-050.]

WAC 173-430-060 Research into alternatives to agricultural burning. (1) The department shall administer the research portion of the permit fee to carry out the recommendations of the Ag task force. In carrying out the recommendations, the department may conduct, cause to be conducted, or approve of a study or studies to explore and test economical and practical alternative practices to agricultural burning. To conduct any such study, the department may contract with public or private entities. Any approved study shall provide for the identification of such alternatives as soon as possible.

(2) The Ag task force will annually review research needs and submitted proposals and make its recommendations to the department.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-060, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-060, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-060, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-060, filed 11/9/77. Formerly WAC 18-16-060.]

WAC 173-430-070 General agricultural burning permit conditions and criteria. Permit decisions including the issuance, denial, or conditioning must be based on consideration of air quality conditions in the area affected by the proposed burning, the time of year, meteorological conditions, the size and duration of the proposed burning activity, the type and amount of vegetative material to be burned, the applicant's need to carry out such burning, existence of extreme burning conditions, risk of escape onto property owned by another, and the public's interest in the environment.

(1) Permits must include the following conditions:

(a) No burning at night except as a best management practice;

(b) Complying with all fire safety regulations of the local fire protection agency including any no-burn directives they may issue;

(c) Calling the local air authority burning information line (if there is one) before lighting the fire;

(d) Burning when wind takes the smoke away from roads, homes, population centers, or other public areas, to the greatest extent possible;

(e) No burning when adverse meteorological conditions;

(f) Burning only natural vegetation;

(g) No burning or adding fuel during any stage of an air pollution episode or local air quality burning ban;

(h) Attending the fire at all times.

(2) If the permitting authority determines a specific situation will cause a nuisance under chapter 173-400 WAC or RCW 70.94.640, agricultural burning will not be allowed.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-070, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-070, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-070, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-070, filed 11/9/77. Formerly WAC 18-16-070.]

WAC 173-430-080 Responsibilities of a permitting authority. The permitting authority must establish and administer an agricultural burning permit system. The minimum responsibilities are described in this section.

(1) The permitting authority must act on a complete application (as determined by the agency) within seven days of receipt.

(a) The permitting authority must evaluate the application and approve or deny all or part of it.

(b) The permitting authority must evaluate the application to determine if the requested burning is within the general or crop-specific best management practices.

(c) If the application is denied, the reason must be stated.

(2) Permitting authorities must determine day-to-day burning restrictions near populated areas and arrange for dissemination of the results.

(3) The permitting authority or its delegate is responsible for responding to agricultural burning complaints.

(4) The permitting authority must collect the fee and determine the local administration portion of the fee.

(a) Permitting authorities must issue a permit fee refund when a farmer decides to burn fewer acres than identified in the permit on confirmation by the permitting authority.

(b) Permitting authorities must formally adopt the local administration portion of the fee through rule, regulation, ordinance, or resolution.

(5) The permitting authority must transfer the research and ecology administration portion of the fee to the department.

(a) Funds should be transferred twice a year or as designated in the delegation agreement.

(b) The department must deposit all agricultural burning permit fees in the air pollution control account. Permitting authorities may deduct the local administration portion before forwarding the remainder to the department. The portion of the fee designated for research shall be deposited in a special account in the air pollution control account.

(6) The permitting authority must coordinate compliance. Violations are subject to the remedies of chapter 70.94 RCW, Washington Clean Air Act.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-080, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-080, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-080, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-080, filed 11/9/77. Formerly WAC 18-16-080.]

WAC 173-430-090 Receiving delegation—Counties, conservation districts, and fire protection agencies. (1) The permitting authority is the local air authority (or the department where no local air authority exists), or their delegate. The permitting authority is responsible for administering the agricultural burning permit program. The agricultural burning permit program may be delegated to conservation districts, counties, or fire protection agencies.

(2) When a local air authority (or the department where no local air authority exists) finds that a county, fire protection agency or conservation district is capable of administering the permit program and desires to do so, it may delegate by administrative order the administration and/or enforcement authority of the program. Delegation criteria include:

(a) Demonstrating that the responsibilities listed under permitting authority responsibilities section can be fulfilled; and

(b) Employing, contracting with, or otherwise accessing someone educated and trained in agronomics.

(3) Delegation may be withdrawn if the department or the local air authority finds that the agricultural burning program is not effectively being administered and/or enforced. Before withdrawing delegation, the delegated agency shall be given a written statement of the deficiencies in the program and a compliance schedule to correct program deficiencies. If the delegated agency fails to correct the deficiencies according to the compliance schedule, then the department or the local air authority may withdraw delegation.

(4) Permitting authorities must work through agreement with counties (if the county is not the permitting authority) and cities to provide convenient methods for issuing permits and granting permission to burn.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-090, filed 1/17/95, effective 2/17/95.]

WAC 173-430-100 Severability. The provisions of this regulation are severable. If any provision is held invalid, the application of such provision to other circumstances and the remainder of the regulation will not be affected.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-100, filed 1/17/95, effective 2/17/95.]

Chapter 173-563 WAC
INSTREAM RESOURCES PROTECTION PROGRAM FOR THE MAIN STEM COLUMBIA RIVER IN WASHINGTON STATE

WAC

WAC 173-563-015 Withdrawal of unappropriated waters. (1) The National Marine Fisheries Service (NMFS) listed Snake River sockeye salmon as endangered under the federal Endangered Species Act on December 20, 1991. NMFS listed Snake River spring/summer and fall chinook salmon as threatened under the act on May 17, 1992. Since then, new information and changing conditions continue to place into question whether sufficient information and data is available for making sound decisions on water availability and the public interest for additional appropriations from the main stem of the Columbia River. In response to the petitions for listing, the northwest governors directed the regional Northwest Power Planning Council to develop a plan for the recovery of the petitioned species and other weak fish stocks in the Columbia Basin. In late 1992 the council finalized its strategy for salmon, which cautioned the states against continuing to allow new appropriations at the same time that there is a regional effort to acquire additional flows for imperiled fish stocks. This regional effort has greatly intensified as a result of additional petitions for Endangered Species Act listings in the basin, consecutive dry years and a 1994 federal court decision that the hydroelectric system operations plan approved by NMFS and the federal operating agencies was not adequate.

(2) Pursuant to subsection (1) of this section, the waters of the main stem of the Columbia River that are unappropriated by water rights for which applications were accepted for filing by the department prior to December 20, 1991, are withdrawn from further appropriation, except that the department may issue a permit to withdraw water for:

(a) Applications filed by the United States for uses of water withdrawn for the Columbia Basin project with a priority date of 1938 under chapter 90.40 RCW;

(b) Nonrecurring temporary projects for up to six months duration, with a possible extension of no more than six additional months (applications for extensions must include adequate justification for the extension and must demonstrate that reasonable efforts are being made to use the water for the project as efficiently as possible);

(c) Nonconsumptive uses which, for the purposes of this section, are defined as uses where:

(i) There is no diversion from the water source; or

(ii) The water is diverted and returned immediately to the source at the point of diversion following its use, in the same quantity as diverted and with no degradation in water quality;

(d) Uses which are necessary for emergency public health and safety needs, when all other reasonable methods of obtaining water (e.g., conservation, efficiencies, etc.) have been exhausted; and

(e) Uses which are specifically intended to benefit weak fish stocks.

(3) All water right applications which the department accepted for filing prior to December 20, 1991, for diversion or pumping of surface water from the main stem of the Columbia River, or for withdrawal of ground water which is part of the main stem of the Columbia River, shall be processed in accordance with existing policies and procedures and are not subject to this withdrawal of waters.

(4) With the exceptions specified in subsection (2) of this section, all water right applications which the department accepted or accepts for filing on or after December 20, 1991, which would result in the diversion or pumping of surface water from the main stem of the Columbia River, regardless of the point of diversion specified in the water right application, are subject to this withdrawal of waters. These applications will be acted upon, without loss of priority date, after the expiration of the withdrawal of waters.

(5) With the exceptions specified in subsection (2) of this section, all water right applications which the department accepted or accepts for filing on or after December 20, 1991, which require a permit under RCW 90.44.050 and would result in the withdrawal of ground water which is in direct hydraulic continuity with the main stem of the Columbia River are subject to this withdrawal of waters. All applications will be evaluated on a case-by-case basis. Applications determined to be subject to the withdrawal will be acted upon, without loss of priority date, after the expiration of the withdrawal of waters.

(6) This section will expire on July 1, 1999, or upon adoption by the department of ecology of a new instream resources protection program for the main stem Columbia River, whichever shall occur first. The instream resources protection program shall be established in accordance with chapter 173-500 WAC (Water resources management program).

[Statutory Authority: Chapter 173-500 WAC, chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW. 95-02-066 (Order 94-18), § 173-563-015, filed 1/3/95, effective 2/3/95. Statutory Authority: Chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW and chapter 173-500 WAC and WAC 173-563-075. 93-01-009 (Order 92-20), § 173-563-015, filed 12/3/92, effective 1/3/93.]

Chapter 173-564 WAC
WATER RESOURCES MANAGEMENT PROGRAM FOR THE MAIN STEM OF THE SNAKE RIVER IN WASHINGTON STATE

WAC

WAC 173-564-040 Withdrawal of unappropriated waters. (1) The National Marine Fisheries Service (NMFS) listed Snake River sockeye salmon as endangered under the federal Endangered Species Act on December 20, 1991. NMFS listed Snake River spring/summer and fall chinook salmon as threatened under the act on May 17, 1992. Since then, new information and changing conditions continue to place into question whether sufficient information and data is available for making sound decisions on water availability and the public interest for additional appropriations from the main stem of the Snake River. In response to the petitions for listing, the Northwest governors directed the regional Northwest Power Planning Council to develop a plan for the recovery of the petitioned species and other weak fish stocks in the Columbia Basin, including the Snake River. In late 1992 the council finalized its strategy for salmon, which cautioned the states against continuing to allow new appropriations at the same time that there is a regional effort to acquire additional flows for imperiled fish stocks. This regional effort has greatly intensified as a result of additional petitions for Endangered Species Act listings in the basin, consecutive dry years and a 1994 federal court decision that the hydroelectric system operations plan approved by NMFS and the federal operating agencies was not adequate.

(2) Pursuant to subsection (1) of this section, the waters of the main stem of the Snake River that are unappropriated by water rights for which applications were accepted for filing by the department prior to December 20, 1991, are withdrawn from further appropriation, except that the department may issue a permit to withdraw water for:

(a) Nonrecurring temporary projects for up to six months duration, with a possible extension of no more than six additional months (applications for extensions must include adequate justification for the extension and must demonstrate that reasonable efforts are being made to use the water for the project as efficiently as possible);

(b) Nonconsumptive uses which, for the purposes of this section, are defined as uses where:

(i) There is no diversion from the water source; or

(ii) The water is diverted and returned immediately to the source at the point of diversion following its use, in the same quantity as diverted and with no degradation in water quality;

(c) Uses which are necessary for emergency public health and safety needs, when all other reasonable methods of obtaining water (e.g., conservation, efficiencies, etc.) have been exhausted; and

(d) Uses which are specifically intended to benefit weak fish stocks.

(3) All water right applications which the department accepted for filing prior to December 20, 1991, for diversion or pumping of surface water from the main stem of the Snake River, or for withdrawal of ground water which is part of the main stem of the Snake River, shall be processed in accordance with existing policies and procedures and are not subject to this withdrawal of waters.

(4) With the exceptions specified in subsection (2) of this section, all water right applications which the department accepted or accepts for filing on or after December 20, 1991, which would result in the diversion or pumping of surface water from the main stem of the Snake River, regardless of the point of diversion specified in the water right application, are subject to this withdrawal of waters. These applications will be acted upon, without loss of priority date, after the expiration of the withdrawal of waters.

(5) With the exceptions specified in subsection (2) of this section, all water right applications which the department accepted or accepts for filing on or after December 20, 1991, which require a permit under RCW 90.44.050 and would result in the withdrawal of ground water which is in direct hydraulic continuity with the main stem of the Snake River are subject to this withdrawal of waters. All applications will be evaluated on a case-by-case basis. Applications determined to be subject to the withdrawal will be acted upon, without loss of priority date, after the expiration of the withdrawal of waters.

(6) This section will expire on July 1, 1999, or upon adoption by the department of ecology of a new instream resources protection program for the main stem Snake River, whichever shall occur first. The instream resources protection program shall be established in accordance with chapter 173-500 WAC (Water resources management program).

[Statutory Authority: Chapter 173-500 WAC, chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW. 95-02-066 (Order 94-18), § 173-564-040, filed 1/3/95, effective 2/3/95; 93-01-010 (Order 92-21), § 173-564-040, filed 12/3/92, effective 1/3/93.]

Title 174 WAC
THE EVERGREEN STATE COLLEGE

Chapters

Chapter 174-116 WAC
PARKING REGULATIONS

WAC